## AFTERSCHOOL EVIDENCE GUIDE

# A COMPANION TO Afterschool Programs: A Review of Evidence Under the Every Student Succeeds Act

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# Introduction

#### About this evidence guide

This evidence guide provides detailed research summaries on the effectiveness of specific afterschool programs for improving outcomes for students in grades K-12. The purpose of the guide is to present information that education agencies, afterschool providers, and others can use as they make decisions about afterschool programming.

The guide is a companion to *Afterschool Programs: A Review* of *Evidence Under the Every Student Succeeds Act*, which is available for free download on the Research for Action website https://www.researchforaction.org/projects/afterschoolessa/. The review is based on a comprehensive, systematic literature search for studies published between 2000-17 of the effectiveness of afterschool programs.

#### Why this guide?

where, and for whom.

make a difference for students—that is, whether they "work." Prior to this review, the full extent of evidence-building about afterschool programs was not known. This guide demonstrates that, since 2000, there have been many rigorous studies of the effectiveness of afterschool programs. Further, there are numerous afterschool programs with evidence of improving students' academic skills, school attendance, physical health, and other outcomes. Not every program improves outcomes, but when programs are studied using rigorous research designs, even those with no effect, mixed effects, or negative effects contribute important learning to the field about what works, what doesn't,

considerable effort in evaluating whether afterschool programs

The afterschool field and its evaluators have invested

The value of investments in building evidence about afterschool programs became especially clear when the Every Student Succeeds Act, or ESSA, became federal law in 2015. ESSA articulates an evidence framework and encourages (or in some cases, requires) its use in programs authorized under the law. Several funding sources for afterschool programs—most notably, the 21st Century Community Learning Centers program, funded at over \$1 billion annually—are authorized under ESSA (see Box 1 for a summary of ESSA titles and evidence requirements). This guide uses the ESSA evidence framework, described below, to assess the evidence for a wide array of afterschool programs.

This guide provides information to use in decision-making about afterschool programming. To use evidence wisely and well, decision-makers should consider whether a program has evidence of effectiveness—as well as other characteristics that make it a good fit. Guidance from the U.S. Department of Education on applying ESSA's evidence framework encourages education agencies to select approaches based on their evidence of effectiveness and a thorough assessment of community needs, resources, and priorities. Programs must also be feasible, affordable, and appropriate for the context and the students they will serve.

This guide also can be used to identify where evidence of effectiveness is still needed. If you know of an afterschool program that is not included in this guide, it means that we were not able to identify any studies of the program's impact on common school-related or physical activity/health outcomes that met our ESSA-informed definition of strong effectiveness research, despite a comprehensive literature search. ESSA encourages education agencies and program providers to fill the evidence gaps by carrying out well-designed studies of afterschool programs. Likewise, the field can continue to advance by conducting more rigorous studies of programs that already have less-rigorous studies of their effectiveness.

#### What this evidence guide does not do

This evidence guide is intended to help decision-makers identify effective afterschool programs. For this reason, the guide and the evidence review on which it is based do not specifically address the larger question of whether afterschool programs, as a class, are effective for improving student outcomes. Further, the review does not rigorously examine which parts of individual programs were effective or seek to generalize across programs about the effectiveness of specific components.

#### ESSA's framework for evidence of program effectiveness

ESSA's evidence framework has four levels, or tiers, ranging from the most rigorous evidence of effectiveness (Tier I, or *Strong*) to the least rigorous (Tier IV, or *Demonstrates a Rationale*). In this guide, we summarize evidence that meets Tier I-III research design requirements for establishing a cause-and-effect relationship between the program and student outcomes. It is important to note that studies with a rigorous research design do not necessarily show that a program improves outcomes. This guide includes studies regardless of whether they show improved outcomes because it is also important to know when a program does not have hoped-for effects. Studies that could meet Tier IV requirements are summarized in Appendix EG-2 of this evidence guide.

ESSA evidence tiers and their requirements for establishing a cause-and-effect relationship are briefly summarized in Box 1. More information about the definition of these tiers is provided in Chapter 2 of the evidence review.

## What this guide includes

This guide includes several types of evidence summaries.

- Summaries of evidence for afterschool programs.
   For each program with at least one study that meets Tier
   I-III research quality standards under ESSA (described below), we provide a multi-page program summary. This summary includes information about program effects, where and with whom the research was conducted, and basic facts about the program's implementation.
- Brief summaries of the effectiveness of school-sponsored extracurricular programs (Appendix EG-1). Studies of the effects of participation in extracurricular programs are within the scope of this review, but because these studies typically provide little information about the content of the programming, we provide paragraphlength summaries only.
- Brief summaries of studies that meet a lower research
  quality standard (Appendix EG-2). For studies that
  compare outcomes for program participants and nonparticipants but do not meet all Tier I-III research quality
  requirements, we provide a paragraph about the study and
  its findings. These studies contribute to a full accounting
  of the effectiveness studies identified in this review.
- Brief summaries of studies with insufficient information
  to assign an ESSA tier (Appendix EG-3). These studies, as
  reported, were missing information needed to determine
  an ESSA rating. These studies contribute to a full accounting
  of the effectiveness studies identified in this review.
- Brief summaries of studies of year-round out-ofschool time programs (Appendix EG-4). Studies of programs that combine afterschool and summer learning programming are not within the scope of this review but may be of interest to decision-makers.

#### Using ESSA evidence tiers in practice: Additional recommendations

To help states apply ESSA evidence tiers to activities funded under the law, in 2016 the U.S. Department of Education issued non-binding, non-regulatory guidance for using the evidence tiers in practice. This guidance, paraphrased below, recommends that decision-makers consider several features of the evidence beyond a cause-and-effect research design and at least one statistically significant improved outcome. Decision-makers should consider whether the evidence demonstrates:

- Broad application. That is, the program has demonstrated its effectiveness in research
  with a sufficiently large group of students (at least 350 students) and in multiple places
  (at least two school districts).
- Similarity. The program has improved outcomes for similar students and/or in a context similar to where the program would be implemented.
- Overall effectiveness. The whole body of evidence about the program indicates that the program improves relevant outcomes.
- No harm. There are no negative findings that would cast doubt on the overall benefit of the program for students.

These recommendations for making sense of research evidence, along with the law's requirements, are described in more detail in Chapter 2 of the evidence review.

The program summaries in this evidence guide provide the information needed to examine whether the evidence for each program meets these additional recommendations.

#### **BOX 1**

#### **Evidence Tiers in ESSA**

- Programs with Tier I evidence must be supported by at least one experimental study, the "gold standard" for establishing cause-and-effect relationships. In these studies, students are randomly assigned to experience a program or to the control group. The study must show that the program improved at least one outcome, and the improvement must be statistically significant, or unlikely to be the result of chance variation.
- Programs with Tier II evidence must be supported by at least one quasi-experimental study that compares outcomes for afterschool program participants to outcomes for a comparison group that is closely matched on important characteristics. As with Tier I evidence, the study must show that the program improved at least one outcome, and the improvement must be statistically significant.
- Programs with Tier III evidence must be supported by at least one study that the law describes as "correlational... with statistical controls for selection bias." Although not specified in the law, the implication is that Tier II and Tier III studies have many similarities but program and comparison groups in Tier III studies are not as closely matched. For example, compared to Tier II studies, Tier III studies may have larger differences between the program and comparison groups on previous achievement, which raises more doubt about whether the study represents an "apples-to-apples" comparison.
- Programs that meet Tier IV requirements provide a
  rationale for why outcomes are likely to improve based on
  existing research described only as "high-quality" in the
  law and are undergoing evaluation of their effectiveness.

#### How we report overall effectiveness of programs

To help readers understand the overall program effectiveness, as recommended by the Department guidance, we provide summaries for each outcome domain. An outcome domain is a broad category of similar outcome measures. Examples of outcome domains are (1) Reading/ELA Achievement and (2) School Attendance and Enrollment.

For each outcome domain in a study, we provide a statement of the overall consistency and direction of effects, using one of four descriptors:

- Positive Effect. The study found at least one improved outcome and no overriding contrary evidence.
- Mixed Effects. The study found a mix of improved and null or negative outcomes.
- No Effect. The study found neither improved nor negative outcomes.
- Negative Effect. The study found at least one negative outcome with no overriding contrary evidence.

To contribute to an outcome domain descriptor, the outcome must meet Tier I-III requirements for establishing a cause-and-effect relationship. When there is more than one study of a program, we provide these descriptors for all studies of the program combined. More detail about how these descriptors are defined appears in Box 2.

#### How required evidence varies by ESSA program

Under some sections of ESSA, one or more activities must be supported by evidence of effectiveness at Tiers I-III. For other ESSA programs, fund recipients must use evidence-based approaches (Tiers I-IV) when evidence "is reasonably available," as determined by states. Some ESSA programs provide competitive preference for implementing evidence-based interventions that meet Tiers I-III. Because of these different requirements and incentives, it is important for decision-makers and afterschool providers to understand which programs authorized under ESSA can support afterschool activities and whether their states have set a minimum evidence level for these programs. Evidence requirements for relevant programs are summarized in Box 3.

#### BOX 2

## Definitions of overall effectiveness

To summarize the overall effectiveness of programs for improving specific outcome domains, this review uses the following definitions. These definitions are adapted from the criteria used by the What Works Clearinghouse to determine effectiveness ratings (see What Works Clearinghouse Procedures Handbook v. 4.0, Table IV.3).

**Positive Effect.** In this review, an outcome domain is described as demonstrating a positive effect when:

- There is only one outcome in the domain, and that outcome shows a statistically significant improvement, OR
- There are at least two statistically significant improved outcomes and no statistically significant negative outcomes.

**Mixed Effects.** In this review, an outcome domain is described as demonstrating mixed effects when:

 There is at least one statistically significant improved outcome and at least one statistically significant negative outcome, but there are more improved than negative outcomes OR  There is at least one statistically significant improved outcome, but there are more "no effect" (not statistically significant) outcomes than improved outcomes.

**No Effect.** In this review, an outcome domain is described as demonstrating no effect when:

 There are no statistically significant improved outcomes or statistically significant negative outcomes.

**Negative Effect.** In this review, an outcome domain is described as demonstrating a negative effect when:

- There is at least one statistically significant negative outcome and no statistically significant improved outcomes, OR
- There is at least one statistically significant negative outcome and at least one statistically significant improved outcome, but there are more negative than improved outcomes.

#### **BOX 3**

# ESSA programs supporting afterschool activities and their evidence requirements

# **ESSA** formula grant activities requiring evidence of effectiveness

Most of Title I, Part A funds are distributed to states through a federal formula and can be used for afterschool activities consistent with the purposes of the Title. Under ESSA Title I, Part A, Section 1003, states must set aside 7 percent of those funds to help support school improvement plans, which ESSA requires for schools designated by states as needing improvement. Each school improvement plan must include evidence-based interventions (i.e., Tiers I-IV). For those schools that receive funds from the 7 percent set-aside for low-performing schools, at least one intervention in each school's improvement plan must be supported by evidence at Tiers I-III.

# **ESSA** formula grant activities that encourage evidence of effectiveness

21st Century Community Learning Centers (Title IV, Part B). The primary federal source for afterschool funding, the 21st Century Community Learning Centers program, is authorized under Title IV, Part B of ESSA. Funding for this program is distributed to states through a formula. States then use the bulk of this to fund afterschool providers through a competitive process. Providers can be local education agencies, community organizations, or other public or private entities. Authorized activities include academic enrichment, including tutoring, and a broad array of other services and activities, such as arts, music, health, social and emotional development, physical fitness, nutrition, substance abuse prevention, career and technical programs, and internship or apprenticeship programs, among others.

#### Direct Student Services funded under Title I (Section 1003A).

ESSA allows states to set aside up to 3 percent of Title I funds for Direct Student Services, including "high-quality academic tutoring" that meets criteria outlined in ESSA (Section 1003(e)). Under No Child Left Behind (NCLB), a previous authorization of the law, these services were known as Supplemental Educational Services (SES); Title I schools that had not made Adequate Yearly Progress for three years were required to offer this option to their low-income students. Some of these SES programs fit our definition of an afterschool program, and several studies of SES are included in this review. ESSA made

such services optional, and states may elect to require that program models have evidence of effectiveness particularly as part of examining their demonstrated record of success during the state approval process for providers.

Title I, Part A formula grants for Targeted Assistance Programs (Section 1115). In targeted assistance schools, Title I funds may be used only to provide supplemental instructional services to students identified as having the greatest need for additional help. Such services may include out-of-school time and expanded learning time programs, including programs held before or after school and during the summer.

# Federal discretionary grants that require evidence of effectiveness

ESSA authorizes seven discretionary grant programs that award competitive points for evidence of effectiveness, per ESSA requirements. Of these, four could be used for afterschool programming.

**Promise Neighborhoods (Section 4624(b)).** This program supports neighborhood-based, cross-sector, "cradle-to-career" solutions to supporting academic success.

Full-Service Community Schools (Section 4625(b)(3)). This program supports partnerships between education agencies and community-based and nonprofit organizations to provide comprehensive services for students and families.

Jacob K. Javitz Gifted and Talented Students Education

Program (Section 4644(f)(2)). A key purpose of the program is
to support programs and projects for identifying and serving
gifted and talented students, including through out-of-school
time programs.

Literacy for All, Results for the Nation (LEARN) grants (ESSA, Section 2224(b)). These grants to states support development of comprehensive literacy plans and a range of other activities, including professional development for educators and stakeholder engagement. Funds unexpended for these key activities may be used to support services for students, including "connecting out-of-school learning opportunities to in-school learning to improve children's literacy achievement."

#### Understanding the Program Summary overview page

Programs with at least one study meeting ESSA Tier I-III research requirements for establishing cause-and-effect have a detailed summary of findings. Programs with multiple studies have summaries for each study, as well as an overall summary of findings across studies.

The first page of each summary provides an overview of the program and the study, including:

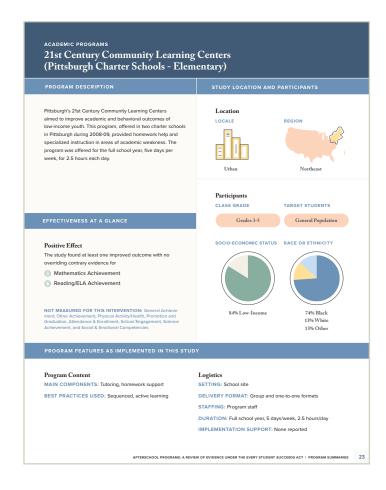
- · A brief narrative description of the program,
- An Effectiveness-At-A-Glance summary of the program's effects in any of 10 outcome domains studied, and
- Information-in-brief about the program location and participants, program features, and implementation.

More detail on each element of the page is provided below.

The Effectiveness-At-A-Glance summary provides a narrative description of the overall effectiveness of the program. Effectiveness is summarized by outcome domain (groupings of related outcome measures).¹ This summary addresses the U.S. Department of Education's recommendation that decision-makers examine the full body of evidence about a program.

Each domain studied receives one of four descriptors: (1) Positive Effect; (2) Mixed Effects; (3) No Effect; or (4) Negative Effect (see Box 2 for more detail about these descriptors).

It is important to note that it is possible for programs to have evidence of a statistically significant improved outcome but not have a Positive Effect rating in that outcome domain. One instance when this would occur is when another outcome in that domain shows a negative effect.



#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

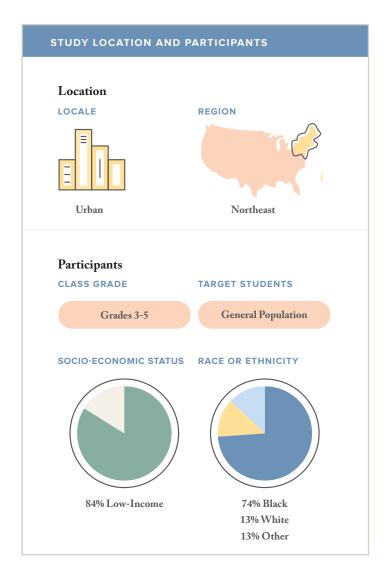
- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

<sup>&</sup>lt;sup>1</sup> This review examined ten outcome domains: Attendance & Enrollment; Engagement with Schooling; General Achievement; Mathematics Achievement; Physical Activity/Health; Promotion & Graduation; Reading/English Language Arts (ELA) Achievement; Science Achievement; Social & Emotional Competencies; and Other Achievement.

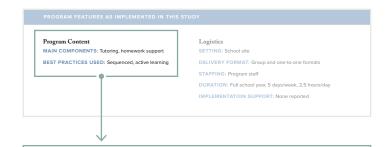
**Study Location and Participants.** This section presents information reported by study authors about where the study took place and the characteristics of students who participated in the study. We also indicate when the authors do not provide this information.

- Locale can be urban, suburban, or rural, or combinations of these.
- Region can be West, Midwest, Southwest, Southeast, or Northeast. We identified no studies conducted in Alaska or Hawaii.
- Class Grade is the grade in school for participants as reported in the study. Some authors report student age rather than grade.
- Target students identifies any specific types of students to which a program was targeted. For example, some programs are intended for overweight students or for students with academic challenges. Programs that are not specifically targeted are identified as general population programs.
- Socio-economic status is the percentage of students in the study eligible for free- or reduced-price lunch, unless otherwise indicated.
- Race or ethnicity summarizes the distribution of race or ethnicity of study participants. For some studies, reporting is incomplete, and percentages do not sum to 100 percent.



Program Content. This section provides basic information about program components and practices. Study authors reported this information inconsistently, and we provide only the information we were able to gather from the studies. Further, although reviewers were trained to identify certain program features, there was necessarily some subjective judgment. We indicate when the authors do not provide this information.

- Main components. These are the primary program activities, as described by the study. Commonly-reported components include tutoring, homework help, sports, drama, music, crafts, apprenticeships, and mentoring.
- Best afterschool practices used. We looked for indications of five types of practices that can contribute to strong afterschool programming:
  - Sequenced programming. Programs that use a connected and coordinated set of activities to achieve objectives offer sequenced programming. One indication of sequenced programming is a program manual or set of lesson plans.
  - Active learning. We looked for indications that the program used active forms of learning to help youth learn new skills.
  - Positive adult-student relationships. We identified a
    program as having positive adult-student relationships
    when the study explicitly mentioned any of the following:
    youth have at least one highly supportive relationship
    with an adult at the program, the program is intentional
    about developing youth/adult relationships (e.g., builds
    in one-on-one time between youth and adult), there is a
    low child-to-staff ratio (10:1 or less), or low staff turnover.
  - Family engagement. We identified a program as having family engagement when the study explicitly mentioned any of the following: program staff are skilled or trained in working with youth and families, program staff are familiar with or training in cultural/language barriers that exist or families of program students, or families receive communication in their own language through various methods (flyers, email, phone, face-to-face) when possible regarding the child's needs and progress.
  - Cultural elements. We identified a program as having cultural elements when the study explicitly mentioned any of the following: program activities or materials that encourage cultural exploration and heritage, program has opportunities for participants to interact with youth who have different cultural identities, or program collects demographic data on participants and seeks to identify underserved populations.



#### **Program Content**

MAIN COMPONENTS: Tutoring, homework support

**BEST PRACTICES USED:** Sequenced, active learning

**Program Logistics.** This section provides information on program implementation features. This information can help decision-makers interpret the findings about effectiveness (for example, was the program likely intensive enough to produce an effect on an outcome?). This information can also to rule in or rule out programs depending on the resources required.

Study authors reported this information inconsistently, and we provide only the information we were able to gather from the studies. Further, although reviewers were trained to identify certain program features, there was necessarily some subjective judgment. We indicate when the authors do not provide this information. Further, we note that program cost was almost never reported by study authors; for this reason, we do not report cost.

- Setting can be school site(s), community site(s), or both.
- *Delivery format* can be group setting, one-to-one formats (such as tutoring or mentoring), or both.
- Staffing can include certified teachers, program staff, volunteers, and/or specialized staffing. Specialized staffing may include therapists or others with special skills, such as university professors or scientists.
- Duration indicates how often the program was offered and for how long. When information is available about how often students actually attended the program (for example, average number of days attended), we include it.
- Implementation quality. We looked for four indicators
   of implementation quality that can contribute to strong
   afterschool programming: (1) availability of a program
   manual; (2) provider training for implementing this
   program; (3) ongoing support for implementation
   through supervision, consultation, coaching, booster
   sessions, debriefing, or other forms of support for the
   program providers; or (4) evidence that at least some
   of the program staff had cultural backgrounds similar
   to those of major groups of students participating in
   the program.



#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff

**DURATION:** Full school year, 5 days/week, 2.5 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### Understanding the Study Details page

The Study Details page(s) for each program will be of greatest interest to those who want to dig deeper into the research itself. This page provides information about the study design, the types of outcomes that were studied, and the specific measures used. Each outcome is characterized by the ESSA evidence tier it meets under different circumstances (described in more detail below), the group of students for whom the outcome was measured, the number of students, and the size and statistical significance of the effect.

- Evidence tier. A key piece of information is the ESSA evidence tier
  that each outcome could meet. We present the ESSA tier for two
  conditions: (1) without site and sample size criteria and (2) with site and
  sample size criteria. The U.S. Department of Education recommends
  that Tier I-II evidence come from a supporting study (or studies) that
  involve more than one site (school district) and have a sample size
  of at least 350. In the afterschool context, it is common for studies that
  are Tier I or II when sample and site criteria are not applied to fall to
  Tier III when these criteria are used.
- Group. This provides information about the grades, cohorts, or other groupings that were measured in some studies. This information is especially relevant when effects for students in different grades or program years were assessed separately.
- Effect size. This is a common way to measure the size of the program's
  effect for an outcome. There is no hard-and-fast rule for determining
  whether an effect size is small, medium, or large, and typical effect
  sizes vary by type of outcome and age of student. We advise that
  decision-makers use effect sizes judiciously, being sure to compare
  effect sizes only for similar outcomes and similar types of students.
- Statistical significance. Outcomes with statistically significant differences (p<.05), either positive or negative, between program and comparison groups are identified with an asterisk.



# Quick-Links to Program Summaries

These links enable quick navigation within the electronic document to programs of interest. The links are organized by afterschool program type. Within each program type, programs with at least one statistically significant positive outcome are listed first, by grade level.

#### Academic programs [2]

In these programs, students may receive tutoring in academic content areas and help with homework.

Although the program may include other activities such as recreation and enrichment, most of the time is spent on academic activities.

#### ACADEMIC PROGRAMS WITH AT LEAST ONE STATISTICALLY SIGNIFICANT IMPROVED OUTCOME

#### For elementary students

- 21st Century Community Learning Centers (Pittsburgh charter schools Elementary)
- Academically-focused extended day program
- · Afterschool reading tutoring (Texas)
- Afterschool tutoring program
- Building Educated Leaders for Life (BELL)
- · ELA Extra and Math Mania
- Raising Education Attainment Challenge

#### For middle grades students

- Middle School Academic Intervention Program
- Supplemental Educational Services (Los Angeles Middle Grades)
- Warrior After School

#### For elementary and middle grades students

- Supplemental Educational Services (Chicago)
- Supplemental Educational Services (Dallas)
- Supplemental Educational Services (Florida)
- Supplemental Educational Services (Minneapolis)

#### For high school students

- Academic Volunteer Mentor Service Program
- Supplemental Educational Services (Los Angeles High School)

#### **ACADEMIC PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES**

#### For elementary students

- 21st Century Community Learning Centers (Georgia Elementary)
- Afterschool literacy program with Barton Reading & Spelling System®
- LeapTrack
- Math Academic Enhancement Program
- · Math program with ST Math
- Purple Sage Elementary Writing Project
- Supplemental Educational Services (Los Angeles Elementary)
- William Penn Initiative for Neighborhood Success

#### For middle grades students

- 21st Century Community Learning Centers (Georgia –Middle Grades)
- 21st Century Community Learning Centers (Pittsburgh charter schools Middle Grades)
- Academic Intervention Services (New York)
- · Academic Remediation Program (South Carolina)
- · After-School Academy
- Intervention Services Inc. tutoring program
- Language Workshop
- New Jersey test prep tutoring program

#### For elementary and middle grades students

- Academic Achievement Academy math tutoring
- Academic Achievement Academy reading tutoring
- Supplemental Educational Services (Louisville)
- Supplemental Educational Services (Milwaukee)
- · Supplemental Educational Services (Mississippi)
- · Supplemental Educational Services (Virginia)

#### For high school students

- College Possible
- Texas afterschool math remediation
- Supplemental education program (Texas)

#### Grade levels not reported

· Supplemental Educational Services (New Mexico)

#### Afterschool plus social supports

These programs incorporate case management and more extensive family involvement in addition to a multicomponent program that includes a range of activities.

# AFTERSCHOOL PLUS SOCIAL SUPPORTS PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES

#### For middle grades students

Challenging Horizons

#### For high school students

· Quantum Opportunity

#### Arts [4]

These programs primarily focus on introducing students to one or more art forms (for example, visual arts, dance, theater, music) and/or developing their artistic skill.

#### ARTS PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES

#### For middle grades students

· Theater arts afterschool program

#### Career and leadership [2]

These programs are a type of Multicomponent program that focuses on career development, postsecondary readiness, and/or leadership development.

# CAREER AND LEADERSHIP PROGRAMS WITH AT LEAST ONE STATISTICALLY SIGNIFICANT IMPROVED OUTCOME

#### For middle grades students

- · Citizen Schools
- Stay-in-School for College and Career Opportunities (SISCO)

#### For high school students

- · After School Matters
- · Hispanic Youth Leadership Program

#### CAREER AND LEADERSHIP PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES

#### For middle grades students

- LEAD Academy
- Time Travelers Leadership Program

#### For high school students

· Ellas/Ellos Mentoring Program

#### Multicomponent 2

Multicomponent programs offer multiple types of activities, and no type of activity dominates the time youth spend in the program. Multicomponent programs typically offer academic support, sports, and arts and crafts programming, and youth can experience multiple of these components.

# MULTICOMPONENT PROGRAMS WITH AT LEAST ONE STATISTICALLY SIGNIFICANT IMPROVED OUTCOME

#### For elementary students

- 21st Century Community Learning Centers (Fresno)
- 21st Century Community Learning Centers (Philadelphia Elementary)
- After School Education and Safety (California Elementary)
- Baltimore Community Schools (Elementary)
- LA's Better Educated Students for Tomorrow (LA's BEST)

- · Multicomponent program (Northeast)
- · Tutoring and enrichment program

#### For middle grades students

- 21st Century Community Learning Centers (Marietta Boys and Girls Club)
- 21st Century Community Learning Centers (Middle Grades)
- 21st Century Community Learning Centers (Philadelphia Middle Grades)
- After School Education and Safety (California Middle Grades)
- The After-School Corporation (Middle Grades)
- AfterZone
- Baltimore Community Schools (Middle Grades)
- Cooke Middle School Afterschool Recreation Program
- Texas After School Initiative

#### For elementary and middle grades students

- · 21st Century Community Learning Centers (St. Louis, Missouri)
- The After-School Corporation (PreK Grade 8)
- Cool Girls

#### For high school students

- 21st Century Community Learning Centers (Philadelphia High School)
- After School Safety and Enrichment for Teens
- The After-School Corporation (High School)

#### MULTICOMPONENT PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES

#### For elementary students

- 21st Century Community Learning Centers (Elementary)
- 21st Century Community Learning Centers (Louisiana)
- 21st Century Community Learning Centers (New Hampshire)
- 21st Century Community Learning Centers (West Virginia Elementary)
- After School Education and Safety (San Francisco Elementary)
- Boston Elementary School After-School Program
- Hope Center for Kids

#### For middle grades students

- 21st Century Community Learning Centers (West Virginia Middle Grades)
- After School Education and Safety (San Francisco Middle Grades)
- Afterschool Program with All Stars Prevention Curriculum
- Santa Ana After School Learning and Safe Neighborhoods Partnerships Program
- School-to-Jobs
- Support Our Students

#### For high school students

- 21st Century Community Learning Centers (West Virginia High School)
- Baltimore Community Schools (High School)

#### Physical activity/health

In these programs, most of the time is focused on healthy living and physical activity.

# PHYSICAL ACTIVITY/HEALTH PROGRAMS WITH AT LEAST ONE STATISTICALLY SIGNIFICANT IMPROVED OUTCOME

#### For elementary students

- America SCORES
- FITKids
- Georgia Prevention Institute Physical Activity Program
- · Girls in the Game
- LA Sprouts
- · Youth Fit for Life

#### For middle grades students

- · Fitness-focused afterschool programs (California)
- Girls on the Move
- Student-centered physical activity program

#### PHYSICAL ACTIVITY/HEALTH PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES

#### For elementary students

- · Afterschool exercise program
- Scouting Nutrition & Activity Program
- GEMS
- · Girlfriends for KEEPS
- · Physical activity program for boys
- SPARK program

#### For middle grades students

Afterschool physical activity program

#### For high school students

COPE TEEN

#### Science, Technology, Engineering, and Mathematics (STEM)

In STEM programs, participants develop their interests in science, technology, engineering, and/or mathematics-related topics. Improving school academic performance is generally not the focus of these programs; instead, the programs seek to engage students in hands-on, active activities that nurture an interest in STEM fields.

#### STEM PROGRAMS WITH AT LEAST ONE STATISTICALLY SIGNIFICANT IMPROVED OUTCOME

#### For elementary students

- 4-H Robotics Program
- Bringing Up Girls in Science (BUGS)

#### For middle grades students

• The Investigators Club

#### For high school students

FIRST Robotics

#### STEM PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES

#### For elementary students

• FIRST Lego League

#### For middle grades students

- Leonardo's Laboratory
- STEM Excellence and Leadership

#### Sports 🖸

Sports programs have a competitive component. Examples include running clubs and school-sponsored team sports.

#### SPORTS PROGRAMS WITH AT LEAST ONE STATISTICALLY SIGNIFICANT IMPROVED OUTCOME

#### For middle grades students

• School-sponsored sports (Texas)

#### For high school students

- · High school interscholastic sports
- · School-sponsored sports (Miami)
- · School-sponsored sports (South Texas)

#### SPORTS PROGRAMS WITH NO EVIDENCE OF IMPROVED OUTCOMES

#### For middle grades students

SquashSmarts

#### For high school students

· School-sponsored sports (Career & technical school)

# SUMMARIES

Academic Programs

# 21st Century Community Learning Centers (Pittsburgh Charter Schools - Elementary)

#### **PROGRAM DESCRIPTION**

Pittsburgh's 21st Century Community Learning Centers aimed to improve academic and behavioral outcomes of low-income youth. This program, offered in two charter schools in Pittsburgh during 2008-09, provided homework help and specialized instruction in areas of academic weakness. The program was offered for the full school year, five days per week, for 2.5 hours each day.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

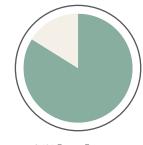
**CLASS GRADE** 

**TARGET STUDENTS** 

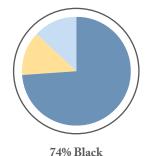
Grades 3-5

**General Population** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



84% Low-Income



13% White 13% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework support

**BEST PRACTICES USED:** Sequenced, active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff

**DURATION:** Full school year, 5 days/week, 2.5 hours/day

**IMPLEMENTATION SUPPORT:** None reported

# Study Details

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool tutoring and homework help program in two charter schools in Pittsburgh, Pennsylvania. The treatment group for mathematics is defined as students who attended at least 50 percent of the days when the program focus was mathematics. The treatment group for reading is defined as students who attended at least 50 percent of the days when the program focus was reading. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2008-09.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
4Sight Pennsylvania Core Standards Benchmark Assessments - mathematics	Tier III	Tier III	Grades 3-5	55	0.60 (0.28)*
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
4Sight Pennsylvania Core Standards Benchmark Assessments - reading	Tier III	Tier III	Grades 3-5	56	0.60 (0.28)*
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

**CITATION:** Dreyer, K. J. (2010). *An examination of academic outcomes for students who attend a school-based afterschool program* (Doctoral dissertation, University of Pittsburgh). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3417442)

# **Academically Focused Extended Day Program**

#### **PROGRAM DESCRIPTION**

This academically focused extended day program, offered in one New York City elementary school during 2001-02, aimed to improve student academic performance with an emphasis on math computation and basic reading skills. Students completed sequenced sets of multi-item worksheets, matched to their skill levels. The program was offered for the full school year, three days per week, for one hour each day. The program was staffed by teachers from the host school.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### **Mixed Effects**

The study found a mix of improved and null or negative outcomes for

Reading/ELA Achievement

OUTCOMES THAT DO NOT MEET TIER I-III STANDARDS FOR CAUSALITY: Social & Emotional Competencies

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, and Science Achievement

#### **Participants**

**CLASS GRADE** 

PreK - Grade 5

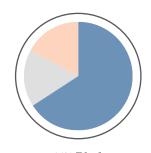
**TARGET STUDENTS** 

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



100% Low-Income



66% Black 17% Latino 17% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Individualized, one-to-one format

**STAFFING:** Certified teachers

**DURATION:** Full school year, 3 days/week, 1 hour/day

**IMPLEMENTATION SUPPORT:** None reported

# Study Details

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool supplemental instruction program in one New York City elementary school. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2001-02.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Evaluator-created formative mathematics assessment	Tier III	Tier III	Grades PreK-1	94	0.60 (0.25)*
Evaluator-created summative mathematics assessment	Tier III	Tier III	Grades PreK-1	94	0.79 (0.27)*
Evaluator-created formative mathematics assessment	§	§	Grades 4-5	62	-0.42 (0.26)
Evaluator-created summative mathematics assessment	Tier III	Tier III	Grades 4-5	62	0.61 (0.26)*
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Evaluator-created formative reading assessment	§	§	Grades PreK-1	94	0.44 (0.25)
Evaluator-created summative reading assessment	Tier III	Tier III	Grades PreK-1	94	0.54 (0.26)*
Evaluator-created formative reading assessment	§	§	Grades 4-5	62	0.03 (0.26)
Evaluator-created summative reading assessment	§	§	Grades 4-5	62	0.09 (0.26)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

<sup>\*</sup> Statistically significant at p<.05

# Afterschool Reading Tutoring (Texas)

#### **PROGRAM DESCRIPTION**

This afterschool reading tutoring program, offered from 2006-07 to 2009-10 in one Texas school, aimed to improve the reading achievement of low-income third grade students who did not meet state reading standards. Certified teachers offered small-group tutoring using activities drawn from the school day curriculum, as well as other resources. Tutoring activities were based on objectives for which students had not yet demonstrated mastery. The duration of the program was not reported.

## **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Urban

REGION



Southwest

#### **Participants**

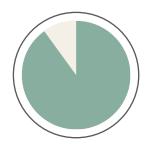
**CLASS GRADE** 

**TARGET STUDENTS** 

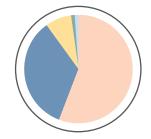
Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY

Grade 3



90% Low-Income



57% Latino 35% Black 8% White

1% Asian 1% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

# Study Details

#### STUDY DESCRIPTION

In this quasi-experiment, outcomes for third grade students who participated in the afterschool tutoring program were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in one school in Texas in 2006-07 to 2009-10.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Texas Assessment of Knowledge and Skills - reading	Tier III	Tier III	Grade 3	152	0.72 (0.17)*
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

# Afterschool Tutoring Program

#### **PROGRAM DESCRIPTION**

This afterschool tutoring program, offered in one school in a medium-sized Midwestern city in 1998-99, aimed to improve the academic performance of low-achieving fourth grade students through afterschool small-group tutoring and homework help. The program was staffed by a teacher and volunteers and offered for the full school year, six hours per week.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement

#### No Effect

The study found neither improved nor negative outcomes for

- Other Achievement
- Social & Emotional Competencies

**NOT MEASURED FOR THIS INTERVENTION: Physical** Activity/Health, Promotion & Graduation, School Engagement, and Science Achievement

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Midwest

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grade 4

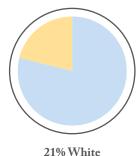
**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



Not Reported



79% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Positive adult-

student relationships

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, 6 hours/week

**IMPLEMENTATION SUPPORT:** None reported

# Study Details

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool tutoring program for fourth graders. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in one school a medium-size Midwestern city in 1998-99.

#### **GENERAL ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Grade point average – 2 quarters into intervention	§	§	Grade 4	65	Cannot determine
Grade point average – end of 1 year	Tier III	Tier III	Grade 4	63	Cannot determine*
	Cannot determine				

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Mathematics course grade – 2 quarters into intervention	Tier III	Tier III	Grade 4	77	Cannot determine*
Mathematics course grade – end of 1 year	Tier III	Tier III	Grade 4	75	Cannot determine*
Average effect size for <i>Mathematics Achievemen</i> t outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **OTHER ACHIEVEMENT**

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Handwriting grade – 2 quarters into intervention	§	§	Grade 4	66	Cannot determine
Handwriting grade – end of 1 year	§	§	Grade 4	64	Cannot determine
Average effect size for Other Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
English language arts course grade – 2 quarters into intervention	Tier III	Tier III	Grade 4	77	Cannot determine*	
English language arts course grade – end of 1 year	Tier III	Tier III	Grade 4	75	Cannot determine*	
Reading course grade – 2 quarters into intervention	§	§	Grade 4	77	Cannot determine	
Reading course grade – end of 1 year	§	8	Grade 4	75	Cannot determine	
Spelling grade – 2 quarters into intervention	§	8	Grade 4	76	Cannot determine	
Spelling grade – end of 1 year	§	8	Grade 4	74	Cannot determine	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SOCIAL & EMOTIONAL COMPETENCIES**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Conduct grade – 2 quarters into intervention	§	§	Grade 4	77	Cannot determine
Conduct grade – end of 1 year	§	§	Grade 4	75	Cannot determine
Effort grade – 2 quarters int intervention	§	§	Grade 4	77	Cannot determine
Effort grade – end of 1 year	§	§	Grade 4	75	Cannot determine
Average effect size for Social & Emotional Competencies outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# **Building Educated Leaders for Life (BELL)**

#### **PROGRAM DESCRIPTION**

Building Educated Leaders for Life (BELL) aimed to improve the reading and math achievement of low-income students in grades K-6 through academic support and enrichment. Certified teachers offered small-group instruction in reading and math using a literature-based reading curriculum (Voices of Love and Freedom) and Houghton Mifflin's MathSteps curriculum. This program, held in seven New York City schools during 2004-05, was offered for most of the school year (24 weeks), three days per week, for 1.5 hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

Urban

#### **Participants**

CLASS GRADE

Grades 3-6

**TARGET STUDENTS** 

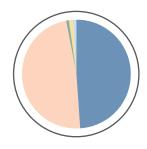
Northeast

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



72% Low-Income



49% Black 48% Latino 1% White 1% Asian 1% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Positive adult-student relationships, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, volunteers, program staff

**DURATION:** 24 weeks, 3 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

# Study Details

#### STUDY DESCRIPTION

This quasi-experimental study was conducted in seven New York City public schools served by Building Educated Leaders for Life (BELL) during 2004-05. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size	
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
CTB McGraw-Hill assessment: mathematics	Tier III	Tier III	Grades 3-6	690	0.23 (0.08)*	
Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size	
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
CTB McGraw-Hill assessment: English language arts	§	§	Grades 3-6	690	-0.06 (0.08)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# ELA Extra and Math Mania

#### **PROGRAM DESCRIPTION**

The ELA Extra and Math Mania afterschool programs, offered in one school district in New York state during 2004-05, aimed to improve the literacy and math skills of suburban fourth grade students who scored below the 50th percentile on third grade standardized tests. Certified teachers used the Best Practices in Reading program and the Foundations in Math 4 curriculum. The program was offered for 22 weeks, three days per week, for one hour each day.

Location

LOCALE

Suburban

## REGION

STUDY LOCATION AND PARTICIPANTS



Northeast

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

Grade 4

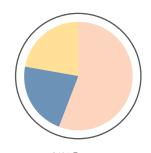
**TARGET STUDENTS** 

**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



57% Low-Income



56% Latino 22% Black 22% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: 22 weeks, 3 days/week, 1 hour/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on mathematics and English language arts achievement of ELA Extra and Math Mania for fourth graders in one school district in New York state. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 2004-05.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New York State Testing Program - mathematics	Tier III	Tier III	Grade 4	188	0.42 (0.15)*
	Average effect	0.42			

<sup>\*</sup> Statistically significant at p<.05

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
New York State Testing Program - language arts	§	§	Grade 4	188	0.22 (0.15)		
	Average effect	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Raising Education Attainment Challenge (REACH)

#### **PROGRAM DESCRIPTION**

The Raising Educational Attainment Challenge (REACH) afterschool tutoring program aimed to increase the reading skills and standardized test scores of low-achieving third and fourth grade students at an urban elementary school in the Midwest. Certified teachers provided homework help and offered individual literacy tutoring using high-interest material. The program was offered from January through April, five days per week, for up to one hour per day.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

Midwest

# REGION

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grades 3-4

**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY

100% Low-Income



27% White 20% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Individualized, one-to-one format

**STAFFING:** Certified teachers

DURATION: January-April, 5 days/week, 30-60 minutes/day

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This study uses a quasi-experimental approach to estimate the impact of the Raising Education Attainment Challenge (REACH) afterschool tutoring program. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in an elementary school in an urban district. It appears that the study was conducted in 2011-12, although the implementation year is not reported directly.

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
SSAT - reading	Tier II	Tier III	Grades 3-4	40	0.95 (0.33)*	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

## Middle School Academic Intervention Program

#### **PROGRAM DESCRIPTION**

The Middle School Academic Intervention Program targeted low-achieving middle grades students in two middle schools in urban California during 2009-10. Certified teachers designed lessons in response to areas of academic need for classes organized by student performance levels. The program was offered for the full school year, five days per week, for 1.5 hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for



#### **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



West

#### **Participants**

**CLASS GRADE** 

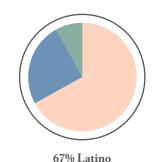
Grades 6-8

**TARGET STUDENTS** 

Low-Achieving Students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





25% Black 8% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: Full school year, 5 days/week, 1.5 hours/day

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool program for students with low test scores in two urban middle schools in California. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2009-10.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
	Sample effected	Sample effected			
Renaissance Star Math score	∞	∞	Grades 6-8	178	-0.35 (0.15)*
Renaissance Star Math gain	∞	∞	Grades 6-8	178	-0.42 (0.15)*
	Average effect	t size for Mathematics Ad	chievement outcor	mes at Tiers I-III	-0.39

<sup>\*</sup> Statistically significant at p<.05

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Renaissance Star Reading score	Tier II	Tier III	Grades 6-8	178	0.43 (0.15)*	
Renaissance Star Reading gain	Tier II	Tier III	Grades 6-8	178	0.65 (0.15)*	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

## Supplemental Educational Services (Los Angeles - Middle Grades)

#### PROGRAM DESCRIPTION

Supplemental Educational Services in Los Angeles aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. Programs provided tutoring in math and/or reading. Services were targeted to any students not scoring proficient on standardized tests across the district. Tutoring during 2009-10 took place online or in small groups and was offered by state-approved providers, including non-profit, for-profit, or faith-based organizations.

#### EFFECTIVENESS AT A GLANCE

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

Reading/ELA Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



West

#### **Participants**

**CLASS GRADE** 

Grades 6-8

**TARGET STUDENTS** 

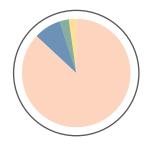
Low-Achieving Students

#### SOCIO-ECONOMIC STATUS

**RACE OR ETHNICITY** 



100% Low-Income



87% Latino 8% Black

3% Asian 2% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Not reported

**STAFFING:** Not reported

**DURATION:** Full school year, average attendance=26 hours

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on mathematics and English language arts achievement of supplemental educational services for middle grades students in Los Angeles Unified School District. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2009-10.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
California Standards Test - mathematics	§	§	Middle grades	9,581	0.01 (0.02)	
	Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
California Standards Test - English language arts	Tier III	Tier III	Middle grades	9,574	0.06 (0.02)*	
	Average effect	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III				

<sup>\*</sup> Statistically significant at p<.05

## Warrior After School

#### **PROGRAM DESCRIPTION**

The Warrior After School program, offered in one middle school in Georgia from 2004-05 to 2007-08, aimed to improve the academic performance of academically at-risk middle school students. Certified teachers provided afterschool instruction to small groups of students. The study does not provide more detail about the content of the program. During 2004-05, 2005-06, and 2007-08, the program was offered from October through April, two days per week, for 1.5 hours each day. In 2006-07, the program ran only from January through April.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Not Reported



Southeast

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

**Low-Achieving Students** 

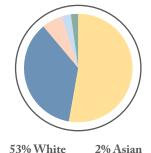
#### SOCIO-ECONOMIC STATUS

Middle Grades

RACE OR ETHNICITY



53% Low-Income



53% White 36% Black 6% Latino

3% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION:** 7 months, 2 days/week, 1.5 hours/day

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of Warriors After School for middle school students in one school in Georgia. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2004-08.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - mathematics	Tier II	Tier II	Middle school	510	0.49 (0.09)*
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	nes at Tiers I-III	0.49

<sup>\*</sup> Statistically significant at p<.05

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - reading	Tier II	Tier II	Middle school	510	0.99 (0.09)*
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	mes at Tiers I-III	0.99

<sup>\*</sup> Statistically significant at p<.05

## Supplemental Educational Services (Chicago)

#### **PROGRAM DESCRIPTION EFFECTIVENESS AT A GLANCE Positive Effect** Supplemental Educational Services in Chicago aimed to increase student achievement in math Overall, the studies found at least one improved and/or reading for students in low-performing outcome with no overriding contrary evidence for Title I schools. The services assessed in this study Mathematics Achievement were offered to students in grades 3-8 who were not proficient on state standardized tests. The Reading/ELA Achievement program provided tutoring and other educational interventions in math and/or reading offered by state-approved providers.

## This review identified three studies of this program.

The findings from each of these studies are presented individually on pages 47 – 53 of this document.

- Heinrich, C. J., Burch, P., Good, A., Acosta, R., Cheng, H., Dillender, M., . . ., Stewart, M. (2014). Improving the implementation and effectiveness of out-of-school-time tutoring. *Journal of Policy Analysis and Management,* 33(2), 471-494.
- Jones, C. J. (2009). The 2008 supplemental educational services program: Year 5 summative evaluation (Unpublished report). Chicago, IL: Chicago Public Schools Office of Extended Learning Opportunities.
- Office of Research, Evaluation, and Accountability. (2007). SES tutoring programs: An evaluation of year 3
  in the Chicago Public Schools (Unpublished report). Chicago, IL: Chicago Public Schools Office of Extended
  Learning Opportunities.

## Supplemental Educational Services (Chicago – 2005-06)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services in Chicago aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. The services assessed in this study were offered during 2005-06 to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other educational interventions in math and/or reading offered by state-approved providers.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Reading/ELA Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

## Location LOCALE REGION

Urban

#### **Participants**

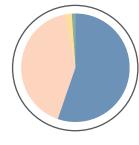
CLASS GRADE TARGET STUDENTS

Grades 3-8 Low-Achieving Students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



 $100\%\ Low-Income$ 



Midwest

56% Black 2% White 42% Latino 1% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff

**DURATION:** Full school year, 30-80 hours offered across sites

#### STUDY DESCRIPTION

This quasi-experiment estimates the impacts of Supplementary Educational Services for Chicago Public Schools students in grades 3-8 who scored at or below the 50th percentile on the state reading or math assessment and who received at least 30 hours of the intervention. The comparison group consists of a matched group of students who were eligible for but did not participate in the program. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in Chicago Public Schools during 2005-06.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Illinois Standards Achievement Test - mathematics	§	§	Grades 3-8	66,088	Cannot determine	
	Average effect	Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III				

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Illinois Standards Achievement Test - reading	Tier III	Tier III	Grades 3-11	68,757	Cannot determine*	
	Average effect	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III				

<sup>\*</sup> Statistically significant at p<.05

## Supplemental Educational Services (Chicago - 2007-08)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services in Chicago aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. The services assessed in this study were offered during 2007-08 to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other educational interventions in math and/or reading offered by state-approved providers.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Midwest

#### **Participants**

**CLASS GRADE** 

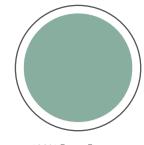
Grades 3-8

**TARGET STUDENTS** 

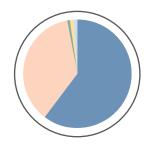
**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



100% Low-Income



61% Black 37% Latino 1% Asian

1% White 1% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Not reported

**STAFFING:** Program staff

**DURATION:** Full school year, 30-80 hours offered across sites

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of Supplementary Educational Services for Chicago Public Schools students in grades 3-8 who received these services in 2007-08. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Illinois Standards Achievement Test - mathematics	Tier III	Tier III	Grades 3-8	57,923	0.04 (0.01)*
	Average effect	t size for <i>Mathematics Ad</i>	chievement outcor	mes at Tiers I-III	0.04

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Illinois Standards Achievement Test - reading	§	§	Grades 3-8	58,079	0.02 (0.01)
	Average effect	size for Reading/ELA A	chievement outcor	mes at Tiers I-III	0.02

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** Jones, C. J. (2009). *The 2008 supplemental educational services program: Year 5 summative evaluation* (Unpublished report). Chicago, IL: Chicago Public Schools Office of Extended Learning Opportunities.

## Supplemental Educational Services (Chicago - 2008-11)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services in Chicago aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. The services assessed in this study were offered during 2008-11 to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other education interventions in math and/or language arts. The services were offered by the district and state-approved private providers.

### Location

STUDY LOCATION AND PARTICIPANTS

LOCALE



Urban

Midwest

REGION

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- **Mathematics Achievement**
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

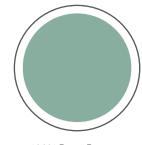
**TARGET STUDENTS** 

Grades 3-8

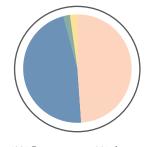
**Low-Achieving Students** 

#### **SOCIO-ECONOMIC STATUS**





100% Low-Income



49% Latino 47% Black

2% Asian 2% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Positive adult-

student relationships

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff

**DURATION:** Not reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of Supplementary Educational Services for Chicago Public Schools students in grades 3-8 who received these at any time during 2008-11. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Illinois Standards Achievement Test/Iowa Test of Basic Skills - mathematics	Tier III	Tier III	Year 1	61,464	0.05 (0.01)*
Illinois Standards Achievement Test/Iowa Test of Basic Skills - mathematics	Tier III	Tier III	Year 2	63,773	0.05 (0.01)*
Illinois Standards Achievement Test/Iowa Test of Basic Skills - mathematics	Tier III	Tier III	Year 3	204,094	0.06 (0.00)*
Illinois Standards Achievement Test/Iowa Test of Basic Skills - mathematics	Tier III	Tier III	Year 4	68,411	0.05 (0.01)*
	Average effect	size for Mathematics Ad	chievement outcor	mes at Tiers I-III	0.05

<sup>\*</sup> Statistically significant at p<.05

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Illinois Standards Achievement Test/lowa Test of Basic Skills - reading	Tier III	Tier III	Year 1	61,171	0.04 (0.01)*	
Illinois Standards Achievement Test/Iowa Test of Basic Skills - reading	Tier III	Tier III	Year 2	63,506	0.09 (0.01)*	
Illinois Standards Achievement Test/Iowa Test of Basic Skills - reading	Tier III	Tier III	Year 3	205,187	0.08 (0.00)*	
Illinois Standards Achievement Test/lowa Test of Basic Skills - reading	Tier III	Tier III	Year 4	68,541	0.04 (0.01)*	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

## Supplemental Educational Services (Dallas)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services, offered in Dallas, Texas from 2008-11, aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. The services assessed in this study were offered to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other education interventions in math and/or language arts. The services were offered by the district and state-approved private providers. The program was offered during the full school year, and the average participant received 22 hours of tutoring.

#### **EFFECTIVENESS AT A GLANCE**

#### **Mixed Effects**

The study found a mix of improved and null or negative outcomes for outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

## REGION

Southwest

#### **Participants**

**CLASS GRADE** 

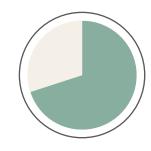
Grades 3-8

**TARGET STUDENTS** 

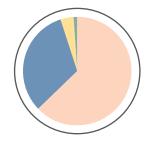
**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



70% Low-Income



63% Latino 32% Black

4% White 1% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Positive adult-

student relationships

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers, program staff

**DURATION:** Full school year, 1 hour/day, average

attendance=22 sessions

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool tutoring programs on mathematics and reading outcomes for students in Dallas, Texas. The comparison group is comprised of students eligible for afterschool tutoring who did not attend any tutoring sessions. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study examined impacts for four years (2008-11).

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Texas Assessment of Knowledge and Skills/State of Texas Assessments of Academic Readiness - mathematics	§	§	Year 1	9,294	-0.08 (.02)*
Texas Assessment of Knowledge and Skills/State of Texas Assessments of Academic Readiness - mathematics	Tier III	Tier III	Year 2	13,806	0.13 (.02)*
Texas Assessment of Knowledge and Skills/State of Texas Assessments of Academic Readiness - mathematics	§	§	Year 3	13,332	0.02 (.02)
Texas Assessment of Knowledge and Skills/State of Texas Assessments of Academic Readiness - mathematics	Tier III	Tier III	Year 4	14,360	0.05 (0.02)*
	Average effect	t size for Mathematics Ad	chievement outcor	nes at Tiers I-III	0.03

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Texas Assessment of Knowledge and Skills/State of Texas Assessments of Academic Readiness - reading	§	§	Year 1	9,294	-0.11 (0.02)*
Texas Assessment of Knowledge and Skills/State of Texas Assessments of Academic Readiness - reading	Tier III	Tier III	Year 2	14,106	0.11 (0.02)*
Texas Assessment of Knowledge and Skills/State of Texas Assessments of Academic Readiness - reading	§	§	Year 3	13,428	0.02 (0.02)
Texas Assessment of Knowledge and Skills/ State of Texas Assess- ments of Academic Readiness - reading	§	§	Year 4	14,670	0.01 (0.02)
	Average effect	size for Reading/ELA A	chievement outcor	mes at Tiers I-III	0.01

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Supplemental Educational Services (Florida)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services in Florida aimed to increase academic achievement in math and/or reading for students in grades 4-10 in low-performing Title I schools. This study reports program impacts for six large Florida districts during 2006-07. Programs provided tutoring in math and/or reading, but the study reports few details about the content or format of the tutoring. Tutoring was offered for the full school year, for up to one hour per day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

## Location

LOCALE



Urban

## REGION

Southeast

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grades 4-10

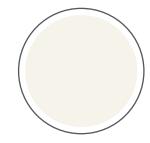
**Low-Achieving Students** 

#### **SOCIO-ECONOMIC STATUS**

**RACE OR ETHNICITY** 



50% Low-Income



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers, volunteers

**DURATION:** Full school year, 30-60 minutes/day

**IMPLEMENTATION SUPPORT:** Provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on mathematics and reading achievement of supplemental educational services for students in grades 4-10 in six large Florida school districts. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2006-07.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Florida Comprehensive Assessment Test - mathematics	Tier III	Tier III	Grades 4-10	3,130	0.12 (0.03)*
	Average effect	t size for Mathematics Ad	chievement outcor	nes at Tiers I-III	0.12

<sup>\*</sup> Statistically significant at p<.05

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Florida Comprehensive Assessment Test - reading	§	§	Grades 4-10	12,720	0.03 (0.02)
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	mes at Tiers I-III	0.03

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Supplemental Educational Services (Minneapolis)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services in Minneapolis, Minnesota, offered in 2008-11, aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. The services assessed in this study were offered to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other education interventions in math and/or language arts. The services were offered by the district and state-approved private providers. The program was offered for the full school year, and the average participant received 28 hours of tutoring.

#### **EFFECTIVENESS AT A GLANCE**

#### **Mixed Effects**

The study found a mix of improved and null or negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Midwest

#### **Participants**

**CLASS GRADE** 

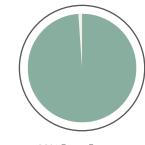
TARGET STUDENTS

Grades 3-8

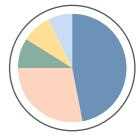
**Low-Achieving Students** 

#### **SOCIO-ECONOMIC STATUS**

RACE OR ETHNICITY



99% Low-Income



47% Black 28% Latino 9% White 9% Asian 7% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Positive adult-

student relationships

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff

**DURATION:** Full school year, 1 hour/day, average

attendance=28 sessions

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool tutoring programs on mathematics and reading outcomes for students in Minneapolis, Minnesota. The comparison group is comprised of students eligible for afterschool tutoring who did not attend any tutoring sessions. The study examines impacts for four years (2008-11).

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Minnesota Comprehensive Assessments II – mathematics	§	§	Year 1	1,400	-0.01 (.05)
Minnesota Comprehensive Assessments II – mathematics	§	§	Year 2	788	-0.01 (.07)
Minnesota Comprehensive Assessments II – mathematics	Tier III	Tier III	Year 3	5,044	0.19 (.03)*
Minnesota Comprehensive Assessments II – mathematics	§	§	Year 4	4,298	0.05 (.03)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.05

<sup>\*</sup> Statistically significant at p<.05

§ Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Minnesota Comprehensive Assessments II – reading	§	§	Year 1	2,862	-0.20 (0.04)*
Minnesota Comprehensive Assessments II – reading	§	§	Year 2	1,602	-0.20 (0.05)*
Minnesota Comprehensive Assessments II – reading	Tier III	Tier III	Year 3	5,024	0.14 (0.03)*
Minnesota Comprehensive Assessments II – reading	§	§	Year 4	4,246	-0.04 (0.03)
	Average effect	size for Reading/ELA A	chievement outcor	mes at Tiers I-III	-0.07

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Academic Volunteer Mentor Service Program

#### **PROGRAM DESCRIPTION**

The Academic Volunteer Mentor Service program, offered in three high schools in California in 1999, was a one-on-one mentoring program that matched volunteer mentors with at-risk students to improve academic performance and prevent school dropout. Mentors from the local community provided support and guidance, particularly focused on academic and behavioral issues. Mentoring was short-term (4-18 months), and students were expected to participate for at least 16 hours in three consecutive months.

#### **EFFECTIVENESS AT A GLANCE**

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- General Achievement
- Reading/ELA Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



West

#### **Participants**

**CLASS GRADE** 

Grades 9-12

**TARGET STUDENTS** 

Students at Risk of Academic Failure & Dropout

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



Not Reported



35% White 18% Black

6% Latino 30% Other

8% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENT: Mentoring

**BEST PRACTICES USED:** Positive adult-

student relationships

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Individualized, one-to-one format

**STAFFING:** Volunteers

**DURATION:** Full school year, 2 sessions/month for up to 6 hours

#### STUDY DESCRIPTION

This quasi-experimental study estimates the impact of the Academic Volunteer Mentor Service Program for students in three high schools in Alameda, California. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in three high schools in 2009-10.

#### **ATTENDANCE & ENROLLMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Number of school days absent	Tier III	Tier III	Grades 9-12	122	3.73 (0.30)*
	Average effe	ct size for <i>Attendance</i> &	Enrollment outcor	mes at Tiers I-III	3.73

<sup>\*</sup> Statistically significant at p<.05

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Grade point average	Tier III	Tier III	Grades 9-12	122	0.65 (0.19)*
	Average 6	effect size for General Ad	chievement outcor	mes at Tiers I-III	0.65

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Stanford Achievement Test 9 – mathematics	§	§	Grades 9-12	122	0.33 (0.18)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.33

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Stanford Achievement Test 9 - language	Tier III	Tier III	Grades 9-12	122	0.84 (0.19)*
Stanford Achievement Test 9 - reading	Tier III	Tier III	Grades 9-12	122	0.71 (0.19)*
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					0.78

<sup>\*</sup> Statistically significant at p<.05

## Supplemental Educational Services (Los Angeles - High School)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services in Los Angeles aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. Programs provided tutoring in math and/or reading for students in grades 9-12. Services were targeted to any students not scoring proficient on standardized tests across the district. In 2009-10, tutoring took place online or in small groups and was offered by state-approved providers including non-profit, for-profit, or faith-based organizations.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Reading/ELA Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

## Location

LOCALE



Urban



West

#### **Participants**

**CLASS GRADE** 

Grades 9-12

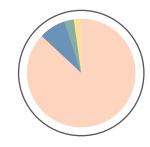
TARGET STUDENTS

**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



100% Low-Income



3% Asian

2% White

87% Latino 8% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Not reported

**STAFFING:** Not reported

**DURATION:** Full school year, average attendance=26 hours

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on mathematics and English language arts achievement of supplemental educational services for high school students in Los Angeles Unified School District. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2009-10.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test - mathematics	§	§	High school	3,611	0.05 (0.03)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test - English language arts	Tier III	Tier III	High school	2,585	0.08 (0.04)*
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					0.08

<sup>\*</sup> Statistically significant at p<.05

## 21st Century Community Learning Centers (Georgia – Elementary)

#### **PROGRAM DESCRIPTION**

This 21st Century Community Learning Center program, offered in two rural schools in North Georgia during 2010-11, aimed to improve math achievement of low-income youth in grades 3-5. The program was staffed by certified teachers, but the study provides no details about the math intervention or its duration.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Rural



Southeast

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

Grades 3-5

**Low-Achieving Students** 

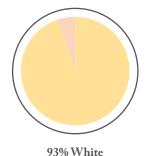
#### SOCIO-ECONOMIC STATUS RAC



**TARGET STUDENTS** 



81% Low-Income



93% vv nite 5% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff

**DURATION:** Not reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool program for students identified as at risk of mathematics failure in two rural schools in Georgia. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 2010-11.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - mathematics	§	§	Grades 3-5	114	0.24 (0.19)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					0.24

 $<sup>\</sup>S$  Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Afterschool Literacy Program with Barton Reading & Spelling System®

#### **PROGRAM DESCRIPTION**

This afterschool literacy program, offered in one school district in Arkansas, aimed to improve the reading and spelling skills of students in grades 3-6 with reading skills below grade level. The program offered tutoring using the Barton Reading & Spelling System®, a multisensory intervention through which students move at their own pace. Tutoring was offered for the full school year, two days per week, and was delivered by trained school personnel as well as students from a local university. It appears that the program was offered during 2013-14.

### Location

LOCALE



Rural



Southeast

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: Attendance & Enrollment, General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

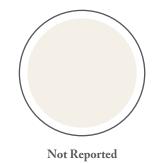
Grades 3-6

STUDY LOCATION AND PARTICIPANTS

TARGET STUDENTS

Students Reading Below Grade Level

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





100% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENT: Tutoring using the Barton Reading

and Spelling System®

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Individualized, one-to-one format

STAFFING: Certified teachers, specialized staffing

**DURATION:** Full school year, 2 days/week

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on mathematics achievement of an afterschool program using the Barton Reading & Spelling System® for students in grades 3-6 in one school district in Arkansas. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. It appears that the study was conducted in 2013-14.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Arkansas Comprehensive Testing, Assessment, and Ability Program Benchmark – mathematics –1 year follow-up	∞	œ	Grades 3-6	38	0.24 (0.33)
Arkansas Comprehensive Testing, Assessment, and Ability Program Benchmark – mathematics –1 year follow-up	∞	∞	Grades 3-6	38	0.37 (0.33)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					0.30

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

## LeapTrack

#### PROGRAM DESCRIPTION

The LeapTrack Assessment and Instruction System was designed to improve reading skills of students in grades 3-5 through a commercial, computer-based supplemental reading program. The program, offered in one school in Tennessee in 2006-07, asked students to listen individually to a story recitation, then read the story on their own, read the story to their teacher, and respond to higher-order questions about the text. The program was offered for eight months, two to three days per week.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Rural



Southeast

#### **Participants**

**CLASS GRADE** 

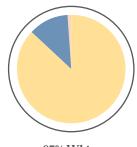
TARGET STUDENTS

Grades 3-5

Low-Achieving

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY

60% Low-Income



87% White 12% Black 1% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Individualized, one-to-one format

**STAFFING:** Certified teachers

**DURATION:** 8 months, 2-3 days/week

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on reading achievement of LeapTrack for students in grades 3-5 who attended 30 or more days of the program. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in one school in Tennessee during 2006-07.

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Tennessee Comprehensive Assessment Program - reading	œ	∞	Grades 3-5	60	0.01 (0.26)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					0.01

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Math Academic Enhancement Program

# **PROGRAM DESCRIPTION**

The Math Academic Enhancement Program, offered in five schools in New York state in 2001-02, was designed to improve the math performance of fourth grade students who were below proficiency on state standardized math assessments. The program, taught by certified classroom teachers, directed teachers to ask higher-order, critical thinking questions to bolster students' abilities to demonstrate verbally and in writing their comprehension of mathematical processes. The program was offered for 12 weeks, two days per week, for approximately one hour each day.

#### **EFFECTIVENESS AT A GLANCE**

## No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

## NOT MEASURED FOR THIS INTERVENTION: General

Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# STUDY LOCATION AND PARTICIPANTS

## Location

LOCALE



Suburban

# REGION



Northeast

# **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grade 4

**Low-Achieving Students** 

## SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



47% Low-Income



Not Reported

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: 12 weeks, 2 days/week, 1.25 hours/day

**IMPLEMENTATION SUPPORT:** Provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the Math Academic Enhancement Program on math achievement for fourth grade students who did not achieve mastery level on a third-grade state standardized assessment. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in five schools in one district in Nassau County, New York, in 2001-02.

# **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Test of New York State Standards - mathematics	§	§	Grade 4	488	0.06 (0.09)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	nes at Tiers I-III	0.06

§ Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Math Program with ST Math

# **PROGRAM DESCRIPTION**

This program, offered in one school in Orange County,
California during 2011-12, targeted students in grades 3-5 who
were below proficiency in math on state standardized tests and
used a spatial temporal (ST) approach to teaching mathematics. ST Math is based on mastery learning theory and includes
the full math curriculum and interactive software. Students also
received homework assistance. The program was offered for
12 weeks, one day per week, for 45 minutes.

# LOCALE

Location

= =

Suburban

## REGION

STUDY LOCATION AND PARTICIPANTS



West

## **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

**CLASS GRADE** 

TARGET STUDENTS

**Low-Achieving Students** 

SOCIO-ECONOMIC STATUS

Grades 3-5





Not Reported



Not Reported

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Sequenced

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, specialized staffing, program staff

**DURATION:** 12 weeks, 1 day/week, 45 minutes/day

# STUDY DESCRIPTION

This quasi-experiment estimates the impact on math achievement of a spatial temporal math software program for students in grades 3-5 in one school in Orange County, California. Outcomes for participants were compared to outcomes for non-participants, some of whom participated in an afterschool homework group. The study was conducted in 2011-12.

## **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
District benchmark mathematics assessment	§	§	Grade 3	29	-0.76 (0.39)
District benchmark mathematics assessment	§	§	Grade 4	16	-0.93 (0.53)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	-0.85

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Purple Sage Elementary Writing Project

# **PROGRAM DESCRIPTION**

The Purple Sage Elementary Writing Project, offered in one school in Houston, Texas in 2003, focused on the development of creativity and student voice through writing with a population of predominantly low-income fourth grade students. The program engaged students in multiple genres of creative writing and integrated visual and performing arts. Activities included the creation of comic books, brochures, and poetry and writing and performing skits. The program was offered for five months, one day per week, for 1.5 hours per day.

#### **EFFECTIVENESS AT A GLANCE**

## No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# STUDY LOCATION AND PARTICIPANTS

# Location

LOCALE



Urban



Southwest

# **Participants**

**CLASS GRADE** 

TARGET STUDENTS

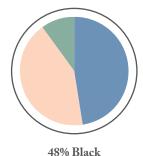
Grade 4

Low-Income

## SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



43% Latino 10% Asian

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Sequenced, active learning

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff

**DURATION:** 5 months, 1 day/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual

# STUDY DESCRIPTION

This quasi-experiment estimates the impact of attending an afterschool writing program on a state standardized writing assessment. Outcomes for the 21 students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in Houston, Texas in 2003.

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Texas Assessment of Knowledge and Skills - writing	§	§	Elementary students	42	0.24 (0.31)
	Average effect	size for Reading/ELA A	chievement outco	mes at Tiers I-III	0.24

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Services (Los Angeles - Elementary)

# **PROGRAM DESCRIPTION**

Supplemental Educational Services in Los Angeles aimed to increase achievement in math and/or reading for students in low-performing Title I schools. Programs provided tutoring in math and/or reading. Services during 2009-10 were targeted to any students not scoring proficient on standardized tests across the District. Tutoring took place online or in small groups and was offered by state-approved providers, including non-profit, for-profit, or faith-based organizations. The program was offered for the full school year and, on average, participants attended 26 hours of tutoring.

#### **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

## STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



**Participants** 

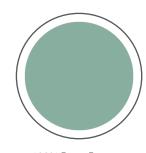
**CLASS GRADE** 

Grades 1-5

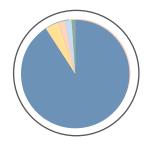
TARGET STUDENTS

Low-Achieving Students

## SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



100% Low-Income



87% Latino 8% Black

3% Asian 2% White

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

# Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Individualized, one-to-one format

**STAFFING:** Not reported

**DURATION:** Full school year, average attendance=26 hours

## STUDY DESCRIPTION

This quasi-experiment estimates the impact on mathematics and English language arts achievement of supplemental educational services for elementary school students in Los Angeles Unified School District. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2009-10.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test - mathematics	§	§	Elementary students	6,076	0.03 (0.03)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.03

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test - English language arts	§	§	Elementary students	9,922	0.03 (0.02)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# William Penn Initiative For Neighborhood Success

# **PROGRAM DESCRIPTION**

The William Penn Initiative for Neighborhood Success program, a 21st Century Community Learning Center offered from 2002-04 in one district in southeast Pennsylvania, was designed to improve the math and reading achievement of low-income urban elementary school students. The program used supplemental reading and math curricula and a basic skills curriculum called Foundations Achievement Math and English. Homework help was provided, and fifth grade students received tutoring to prepare them for the state standardized tests. The program also included weekly enrichment clubs. The program was offered for the full school year, five days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement
- School Engagement
- Social & Emotional Competencies

**NOT MEASURED FOR THIS INTERVENTION:** Physical Activity/ Health, Promotion & Graduation, and Science Achievement

## STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

# REGION



Northeast

# **Participants**

**CLASS GRADE** 

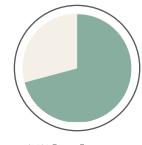
Grades K-6

TARGET STUDENTS

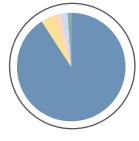
Low-Income

## SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



71% Low-Income



91% Black 1% Asian 4% White 2% Other 2% Latino

PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

## **Program Content**

MAIN COMPONENTS: Tutoring, homework support

**BEST PRACTICES USED:** Family engagement

## Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training, ongoing support

## STUDY DESCRIPTION

This randomized controlled trial estimates the impact of an afterschool program offered during 2002-04 for students in grades K-6. The study was conducted in one elementary school in the William Penn School District in southeast Pennsylvania. Outcomes for students who were randomly selected for an offer to participate in the afterschool program are compared to outcomes for students who did not receive the offer. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **ATTENDANCE & ENROLLMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Number of school days absent	§	§	Grades K-6	98	-0.23 (0.21)
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Report card grade: homework	§	§	Grades K-6	102	-0.29 (0.21)	
Average effect size for General Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier				
Outcome	Without site and sample criteria	With site and sample criteria	Group	Number of students	Effect size (Standard error)
Mathematics course grade	§	§	Grades K-6	95	-0.06 (0.21)
	Average effect	t size for Mathematics Ad	chievement outcor	mes at Tiers I-III	-0.06

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Study Details (Continued)

## **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site & sample criteria	With site & sample criteria	Group	students	(Standard error)	
Reading course grade	§	§	Grades K-6	95	-0.14 (0.21)	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### SCHOOL ENGAGEMENT

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Report card grade: academic behavior	§	§	Grades K-6	94	-0.06 (0.21)	
School attachment (self-report)	§	§	Grades K-6	53	-0.13 (0.28)	
	Average effect size for School Engagement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## **SOCIAL & EMOTIONAL COMPETENCIES**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Academic focus (teacher report)	§	§	Grades K-6	98	0.33 (0.20)	
Report card grade: non-academic behavior	§	§	Grades K-6	94	0.00 (0.21)	
	Average effect size for Social & Emotional Competencies outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** Zief, S. G. (2005). *A mixed-methods study of the impacts and processes of an afterschool program for urban elementary youth* (Doctoral dissertation, University of Pennsylvania). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3165777)

# 21st Century Community Learning Centers (Georgia - Middle Grades)

# PROGRAM DESCRIPTION

This 21st Century Community Learning Center program, offered in two rural schools in North Georgia during 2010-11, aimed to improve math achievement of low-income youth in grades 6-8. The program was staffed by certified teachers, but the study provides no details about the math intervention or its duration.

# STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Rural



Southeast

## **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

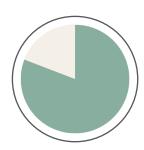
**CLASS GRADE** 

TARGET STUDENTS

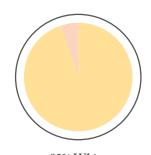
Grades 6-8

**Low-Achieving Students** 

## SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



81% Low-Income



93% White 5% Latino

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff

**DURATION:** Not reported

# STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool program for students identified as at risk of mathematics failure in a school in Georgia during 2010-11. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - mathematics	œ	00	Grades 6-8	66	0.16 (0.25)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.16

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# 21st Century Community Learning Centers (Pittsburgh Charter Schools - Middle Grades)

# **PROGRAM DESCRIPTION**

Pittsburgh's 21st Century Community Learning Centers aimed to improve academic and behavioral outcomes of low-income youth. This program, offered in two charter schools in Pittsburgh during 2008-09, provided homework help and specialized instruction in areas of academic weakness. The program was offered for the full school year, five days per week, for 2.5 hours each day.

# STUDY LOCATION AND PARTICIPANTS

# Location

LOCALE



Urban



## **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

**CLASS GRADE** 

TARGET STUDENTS

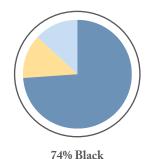
Grades 6-8

Low-Income

## SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



84% Low-Income



13% White 13% Other

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Sequenced, active learning

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff

**DURATION:** Full school year, 5 days/week, 2.5 hours/day

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool tutoring and homework help program in two charter schools in Pittsburgh, Pennsylvania. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The treatment group for mathematics is defined as students who attended at least 50 percent of the days when the program focus was mathematics. The treatment group for reading is defined as students who attended at least 50 percent of the days when the program focus was reading. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2008-09.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
4Sight Pennsylvania Core Standards Benchmark Assessments - mathematics	§	8	Grades 6-8	35	-0.18 (0.36)
	Average effec	t size for <i>Mathematics A</i>	chievement outco	mes at Tiers I-III	-0.18

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
4Sight Pennsylvania Core Standards Benchmark Assessments - reading	§	§	Grades 6-8	41	-0.29 (0.32)	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Academic Intervention Services (New York)

# **PROGRAM DESCRIPTION**

This program, offered in one middle school on Long Island, New York during 1999-2001, was designed for students identified by their teachers as at risk of not passing the eighth grade English Regents exam. Teachers offered supplementary instruction in English language arts using a curriculum they designed, with extensive use of the Day Book of Critical Reading and Writing. The program was offered for five weeks, two days per week, for one hour each day.

# Location LOCALE



Suburban

#### REGION

STUDY LOCATION AND PARTICIPANTS



Northeast

## **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grade 8

**Low-Achieving Students** 

## SOCIO-ECONOMIC STATUS





2% Low-Income



95% White

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

MAIN COMPONENTS: Supplemental instruction, tutoring

**BEST PRACTICES USED:** Sequenced

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: 5 weeks, 2 days/week, 1 hour/day

# STUDY DESCRIPTION

This quasi-experiment compared outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during the 1999-2000 and 2000-01 school years in one middle school located on Long Island in New York.

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New York State English language arts assessment	§	§	Grade 8	157	0.00 (0.18)
	Average effect	size for Reading/ELA A	chievement outcor	mes at Tiers I-III	0.00

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Academic Remediation Program (South Carolina)

# **PROGRAM DESCRIPTION**

This academic remediation program, offered in two rural middle schools in Orangeburg County, South Carolina, aimed to help struggling seventh grade African American students improve their scores on state standardized achievement tests. The program was taught by certified teachers and consisted of afterschool classes in each of the four core content areas (math, reading, science, and social studies). Students rotated through all four areas regardless of their areas of weakness. Teachers used test preparation manuals aligned to the state tests and provided worksheets from other sources. The program was offered for seven months, three days per week, for two hours per day.

#### **EFFECTIVENESS AT A GLANCE**

## No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Rural



Southeast

# **Participants**

**CLASS GRADE** 

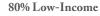
TARGET STUDENTS

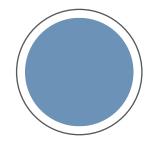
Grade 7

**Low-Achieving Students** 

## SOCIO-ECONOMIC STATUS RACE OR ETHNICITY







100% Black

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Not reported

**STAFFING:** Certified teachers

DURATION: 7 months, 3 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Program manual

## STUDY DESCRIPTION

This quasi-experiment estimates the impacts of attending an afterschool program offering remediation in English language arts, social studies, math, and science. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2005-06 in two rural middle schools in Orangeburg County, South Carolina.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Palmetto Achievement Challenge Test - mathematics	00	∞	Grade 7	145	-0.05 (0.17)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	-0.05

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet ESSA Tier II because there is not a statistically significant improvement in the outcome.

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Palmetto Achievement Challenge Test - English language arts	œ	œ	Grade 7	145	-0.23 (0.17)	
	Average effect	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III				

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# After-School Academy

## **PROGRAM DESCRIPTION**

After-School Academy, offered in one middle school in Georgia during 2006-07, was intended to improve academic skills of low-achieving students. The program was staffed by certified math, science, and English/language arts teachers. Teachers were encouraged to follow the curriculum of the regular school day in their afterschool lessons. After-School Academy was offered for six months, three days per week, two hours each day.

#### **EFFECTIVENESS AT A GLANCE**

## No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# STUDY LOCATION AND PARTICIPANTS

## Location

LOCALE



Not Reported



Southeast

# **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grades 6-8

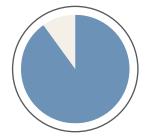
**Low-Achieving Students** 

## SOCIO-ECONOMIC STATUS

## RACE OR ETHNICITY



82% of students at the school are low-income



90% of students at the school are Black

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: 6 months, 3 days/week, 2 hours/day

## STUDY DESCRIPTION

This quasi-experiment the impact of an afterschool program in one middle school in Georgia. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2005-06.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - mathematics	œ	00	Grades 6-8	38	0.00 (0.32)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.00

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion-Ref- erenced Competency Test - reading	§	§	Grades 6-8	38	-0.12 (0.32)
	Average effect	size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	-0.12

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Intervention Services Inc. Tutoring Program

# **PROGRAM DESCRIPTION**

The Intervention Services Inc. tutoring program, offered in one alternative school in central Florida in 2009, aimed to increase the reading levels of struggling middle school readers in a short period of time. The program provided small-group instruction and used a variety of strategies, including differentiated instruction, personalized instruction, and response to intervention. The program was offered for six months, two days per week, 1.5 hours each day.

# STUDY LOCATION AND PARTICIPANTS

# Location

LOCALE



Urban

Southeast



#### **EFFECTIVENESS AT A GLANCE**

## No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- General Achievement

# **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for

Reading/ELA Achievement

## **NOT MEASURED FOR THIS INTERVENTION: Mathematics**

Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

CLASS GRADE

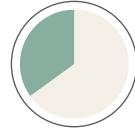
TARGET STUDENTS

Grades 6-8

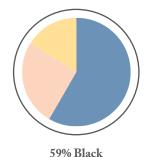
**Low-Achieving Students** 

## **SOCIO-ECONOMIC STATUS**

## **RACE OR ETHNICITY**







16% White 26% Latino

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Sequenced

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** 6 months, 2 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool reading program offered by Intervention Services Inc. for students in grades 6-8 who had been expelled from their schools. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 2009 in one school in central Florida.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Number of school days absent	∞	œ	Grades 6-8	51	0.23 (0.28)	
	Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
GPA	00	∞	Grades 6-8	51	-0.50 (0.28)	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Group Reading and Diagnostic Evaluation	00	œ	Grades 6-8	51	-0.79 (0.29)*
	Average effect	size for Reading/ELA A	chievement outcor	nes at Tiers I-III	-0.79

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

**CITATION:** Lightner, P. A. (2010). Expelled middle school students: A study of the effects of a short-term, afterschool reading intervention program (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3423819)

<sup>\*</sup> Statistically significant at p<.05

# Language Workshop

# **PROGRAM DESCRIPTION**

Language Workshop, offered in one middle school in Southern California in 2006-07, aimed to develop the academic vocabulary, word exposure, and word knowledge of English learners. The program involved a focus on target words, instruction on methods for independent vocabulary acquisition, and direct instruction related to word definitions. The program was offered for five weeks, four days per week, for 75 minutes per day.

# STUDY LOCATION AND PARTICIPANTS

## Location

LOCALE



Suburban



West

**TARGET STUDENTS** 

#### **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and

Social & Emotional Competencies

# **Participants**

**CLASS GRADE** 

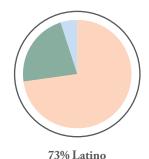
Grades 6-8

**English Language Learners** 

#### **SOCIO-ECONOMIC STATUS RACE OR ETHNICITY**



Not Reported



22% Asian 5% Other

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

MAIN COMPONENT: Foreign language

**BEST PRACTICES USED:** Sequenced, active learning

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Specialized staffing

DURATION: 5 weeks, 4 days/week, 1.25 hours/day

## STUDY DESCRIPTION

This quasi-experiment, originally designed as a randomized controlled trial, estimates the impact of Language Workshop on vocabulary development for English learners in grades 6-8 in one middle school in Southern California. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2006-07.

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Peabody Picture Vocabulary Test-III - Vocabulary Measures	00	00	Grades 6-8	37	0.05 (0.33)
Test of Word Reading Efficiency (TOWRE) - Word Recognition measure	00	œ	Grades 6-8	37	0.26 (0.33)
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	0.16

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# New Jersey Test Prep Tutoring Program

# **PROGRAM DESCRIPTION**

This New Jersey test prep tutoring program, offered in one middle school in a large district in 2006-07, aimed to improve the math or language arts standardized test scores of eighth grade students who had previously scored near-passing on either of these tests. The program, taught by certified teachers, offered small-group tutoring and instruction on test-taking strategies. The program was offered for six months, two days per week, 1.5 hours each day.

# STUDY LOCATION AND PARTICIPANTS

# Location

LOCALE



Urban

Northeast

REGION

#### **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grade 8

**Low-Achieving Students** 

## SOCIO-ECONOMIC STATUS RACE (

**RACE OR ETHNICITY** 



40% Black

60% Low-Income

35% Latino 25% White

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Sequenced

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers

**DURATION:** 6 months, 2 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual,

ongoing support

## STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool tutoring program for students who scored just below the passing score on the New Jersey state standardized mathematics test, English language arts test, or both tests. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2006-07.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New Jersey Grade Eight Proficiency Assessment - mathematics	00	00	Grade 8	57	0.45 (0.28)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.45

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New Jersey Grade Eight Proficiency Assessment - English language arts	00	œ	Grade 8	60	0.41 (0.27)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Academic Achievement Academy - Math Tutoring

# **PROGRAM DESCRIPTION**

This program, offered in 20 schools in the Wake County (NC) Public School System in 2011-12, sought to increase student academic achievement among students close to proficient on End-of-Grade and End-of-Course mathematics exams. The program provided small-group tutoring in mathematics, conducted by a certified teacher from the school. Tutoring sessions were held for 11 weeks, two days per week, 1.5 hours each day.

## **EFFECTIVENESS AT A GLANCE**

## No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

# STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Urban

REGION



Southeast

# **Participants**

**CLASS GRADE** 

Grades 4-8

**TARGET STUDENTS** 

**Low-Achieving Students** 

## **SOCIO-ECONOMIC STATUS**

69% Low-Income

RACE OR ETHNICITY



61% Black 22% Latino

1% Asian 4% Other

13% White

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

MAIN COMPONENT: Tutoring

**BEST PRACTICES USED:** Sequenced, positive

adult-student relationships

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, specialized staffing

DURATION: 10 weeks, 2 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Provider training

# STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool tutoring program for students who were close to proficient on End-of-Grade and End-of-Course exams. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 20 schools in the Wake County Public School System in 2011-12.

## **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Score on End-of- Grade Mathematics Assessment	∞	∞	Grades 4-8	658	-0.06 (0.07)
Met mathematics growth target	œ	∞	Grades 4-8	658	0.07 (0.08)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					.01

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Academic Achievement Academy - Reading Tutoring

## **PROGRAM DESCRIPTION**

This program, offered in 20 schools in the Wake County (NC) Public School System in 2011-12, sought to increase student academic achievement among students close to proficient on End-of-Grade and End-of-Course reading exams. The program provided small-group tutoring in reading, conducted by a certified teacher from the school. Tutoring sessions were held for 11 weeks, two days per week, 1.5 hours each day.

# Location

LOCALE



Suburban, Urban

REGION

STUDY LOCATION AND PARTICIPANTS



Southeast

## **EFFECTIVENESS AT A GLANCE**

# **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for



Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

**CLASS GRADE** 

Grades 4-8

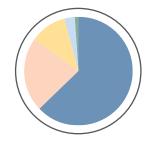
TARGET STUDENTS

**Low-Achieving Students** 

## SOCIO-ECONOMIC STATUS

69% Low-Income

# RACE OR ETHNICITY



63% Black 22% Latino 11% White

1% Asian 3% Other

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT:** Tutoring

BEST PRACTICES USED: Sequenced, positive adult-

student relationships

# Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, specialized staffing

DURATION: 10 weeks, 2 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Provider training

# STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool tutoring program on reading outcomes for students who were close to proficient on End-of-Grade and End-of-Course exams. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 2011-12.

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Score on End-of-Grade Reading Assessment	∞	œ	Grades 4-8	978	-0.07 (0.06)
Met reading growth target	œ	œ	Grades 4-8	978	-0.18 (0.06)*
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					13

<sup>\*</sup> Statistically significant at p<.05

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Services (Louisville)

# **PROGRAM DESCRIPTION**

Supplemental Educational Services, offered in Louisville, Kentucky during 2009-10, aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. The program provided tutoring, typically for several months in the second half of the school year. Length and frequency of sessions and approaches taken varied. Providers ranged from local community-based organizations to large national for-profit organizations.

# STUDY LOCATION AND PARTICIPANTS

## Location

LOCALE



Urban



Southeast

## **EFFECTIVENESS AT A GLANCE**

# No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# **Participants**

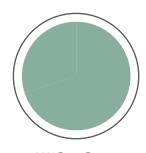
**CLASS GRADE** 

TARGET STUDENTS

Grades 4-8

**General Population** 

## SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



100% Low-Income



 $30\%\,White$ 

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

# Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff

DURATION: 3-5 months, 2 days/week, 1 hour/day

# STUDY DESCRIPTION

This quasi-experiment estimates the impact of Supplemental Educational Services for students in grades 4-8 in Jefferson County (KY) Public Schools. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during 2009-10.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Kentucky Core Content Test - mathematics	∞	∞	Math tutoring	656	0.06 (0.08)
Kentucky Core Content Test - mathematics	∞	∞	Reading & math tutoring	852	0.04 (0.07)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					0.05

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

Outcome	ESSA evidence tier		Constant	Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Kentucky Core Content Test - reading	œ	∞	Reading tutoring	687	0.04 (0.08)
Kentucky Core Content Test - reading	∞	œ	Reading & math tutoring	852	-0.02 (0.07)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					0.01

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Services (Milwaukee)

# **PROGRAM DESCRIPTION**

Supplemental Educational Services offered in Milwaukee, Wisconsin from 2008-11 aimed to increase achievement in math and/or reading for students in low-performing Title I schools. The services assessed in this study were offered to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other education interventions in math and/or language arts. The services were offered by the district and state-approved private providers. The program was offered for the full school year, and the average participant received 26 hours of tutoring.

#### **EFFECTIVENESS AT A GLANCE**

## No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

# **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

## STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



# REGION

Midwest

# **Participants**

**CLASS GRADE** 

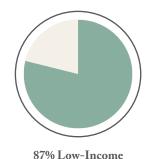
Grades 3-8

**Low-Achieving Students** 

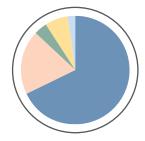
## SOCIO-ECONOMIC STATUS R

**RACE OR ETHNICITY** 

**TARGET STUDENTS** 



68%



68% Black 19% Latino

4% Asian 2% Other

7% White

Latino 2% O

# PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

# **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Positive adult-

student relationships

# Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers, program staff

**DURATION:** Full school year, 1 hour/day,

average attendance=26 sessions

# STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool tutoring programs on mathematics and reading outcomes for students in Milwaukee, Wisconsin. The comparison group is comprised of students eligible for afterschool tutoring who did not attend any tutoring sessions. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study examined impacts for four years (2008-11).

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Wisconsin Knowledge and Concepts Evaluation – mathematics	§	§	Year 1	4,772	-0.05 (0.03)
Wisconsin Knowledge and Concepts Evaluation – mathematics	§	§	Year 2	1,870	-0.05 (0.05)
Wisconsin Knowledge and Concepts Evaluation – mathematics	§	§	Year 3	2,830	-0.04 (0.04)
Wisconsin Knowledge and Concepts Evaluation – mathematics	§	§	Year 4	3,662	0.03 (0.03)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					-0.03

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Wisconsin Knowledge and Concepts Evaluation – reading	§	§	Year 1	4,696	-0.08 (0.03)*
Wisconsin Knowledge and Concepts Evaluation – reading	§	§	Year 2	1,840	-0.08 (0.05)
Wisconsin Knowledge and Concepts Evaluation – reading	§	§	Year 3	2,826	0.02 (0.04)
Wisconsin Knowledge and Concept Evaluation – reading	§	§	Year 4	3,668	-0.02 (0.03)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					-0.04

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Services (Mississippi)

#### **PROGRAM DESCRIPTION**

This Supplemental Educational Services program, offered in one rural elementary school in Mississippi, provided tutoring that aimed to improve ELA standardized achievement scores for elementary school students. Students who scored minimal or basic on state English language arts tests were invited to participate. No information is given on the content of the tutoring program. The program was offered for the full school year, three days per week, two hours each day.

**EFFECTIVENESS AT A GLANCE** 

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Rural



Southeast

#### **Participants**

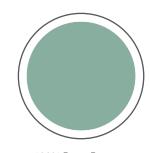
**CLASS GRADE** 

Grades 3-6

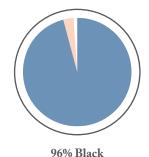
**TARGET STUDENTS** 

**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



100% Low-Income



3% Latino 1% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Individualized, one-to-one format

**STAFFING:** Not reported

DURATION: Full school year, 3 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool tutoring program offered in one elementary school in rural Mississippi. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2008-09.

#### **READING/ELA ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Mississippi Curriculum Test - language arts	§	§	Grades 3-6	169	0.11 (0.15)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Services (North Carolina)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services offered in North Carolina in 2007-08 aimed to increase achievement in math and/ or reading for students in low-performing Title I schools. Services were targeted to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other academic supports, from a range of providers in math and/or language arts during non-school hours. The program was offered for the full school year, and the average participant received 31 hours of tutoring.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Rural, Urban

REGION



Southeast

#### **Participants**

**CLASS GRADE** 

Grades 3-6

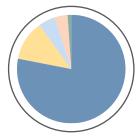
**TARGET STUDENTS** 

**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS

97% Low-Income

# RACE OR ETHNICITY



79% Black 12% White 4% Latino

1% Asian 5% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Not reported

**STAFFING:** Not reported

**DURATION:** Full school year, average 31 hours of programming

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

To estimate the effects of supplemental services on outcomes for students in grades 3-8, this quasi-experimental study statistically matched students who received the intervention to students who were eligible for but did not receive services. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in North Carolina in 2007-08.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
North Carolina End-of- Grade Test - reading	∞	œ	Grades 3-8	3,942	-0.05 (0.03)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Services (Virginia)

#### **PROGRAM DESCRIPTION**

#### **EFFECTIVENESS AT A GLANCE**

Supplemental Educational Services offered in Virginia in 2007-08 and 2008-09 aimed to increase student achievement in math and/or reading for students in low-performing Title I schools. The services assessed in this study were offered to students in grades 3-8 who were not proficient on state standardized tests. The program provided tutoring and other educational interventions in math and/or reading offered by state-approved providers.

#### No Effect

Overall, the studies found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

This review identified two studies of this program.

The findings from each of these studies are presented individually on pages 114 – 117 of this evidence guide.

- Ford, J., Harrison, L., Neergaard, L. Qian, H., Zoblotsky, T., McKay, D., & Ross, S. M. (2009). *Supplemental educational services in the Commonwealth of Virginia: 2007-2008* (CREP Report). Memphis, TN: Center for Research in Educational Policy, University of Memphis.
- McKay, D., Paek, J., Harrison, L., Qian, H., Zoblotsky, T., Ross, S. M., Fedde, F., & Ford, J. (2008). *Supplemental education services in the state of Virginia: 2006-2007* (CREP Report). Memphis, TN: Center for Research in Educational Policy, University of Memphis.

# Supplemental Educational Services (Virginia - 2006-07)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services offered in Virginia in 2006-07 aimed to increase student achievement in math and/ or reading for students in low-performing Title I schools. The program was offered to students in grades 4-8 who were not proficient on state standardized tests. The program consisted of tutoring and other supports in math and/or language arts offered by state-approved providers.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Rural, Urban

# REGION



Southeast

#### **Participants**

**CLASS GRADE** 

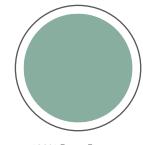
TARGET STUDENTS

Grades 4-8

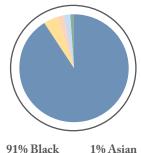
**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



100% Low-Income



4% White

1% Asian 2% Other

#### 2% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff **DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

To estimate the effects of supplemental services on outcomes for students in grades 4-8, this quasi-experimental study statistically matched students who received the intervention to students who did not receive services. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in Virginia in 2006-07.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria		students	(Standard error)		
Standards of Learning – mathematics	∞	∞	Grades 4-8	300	0.06 (0.12)	
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size (Standard error)	
Outcome	Without site and sample criteria					
Standards of Learning – reading	∞	œ	Grades 4-8	540	-0.14 (0.09)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Services (Virginia - 2007-08)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services offered in Virginia in 2007-08 aimed to increase student achievement in math and/ or reading for students in low-performing Title I schools. The services assessed in this study were offered to students in grades 4-8 who were not proficient on state standardized tests. The program consisted of tutoring and other supports in math and/or language arts offered by state-approved providers.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Rural, Urban



Southeast

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

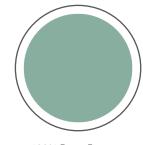
TARGET STUDENTS

Grades 4-8

**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS RAC





100% Low-Income



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Not reported

STAFFING: Not reported

**DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

To estimate the effects of supplemental services on outcomes for students in grades 4-8, this quasi-experimental study statistically matched students who received the intervention to students who did not receive services. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in Virginia in 2007-08.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria			(Standard error)	
Standards of Learning – mathematics	00	œ	Grades 4-7	606	0.07 (0.08)	
Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria		(Standard error)				
Standards of Learning – reading	œ	œ	Grades 4-7	716	-0.09 (0.07)		
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# College Possible

#### **PROGRAM DESCRIPTION**

College Possible, offered in five high schools in Minneapolis and St. Paul during 2010-12, aimed to increase college enrollment and persistence for low-income students in grades 11 and 12. The two-year afterschool program provided ACT/SAT preparation, including intensive tutoring, and college counseling regarding admissions, financial aid, and the transition to college. The program offered 320 hours of programming.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement
- Attendance & Enrollment

NOT MEASURED FOR THIS INTERVENTION: Physical Activity/ Health, Other Achievement, Promotion & Graduation, School Engagement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Midwest

#### **Participants**

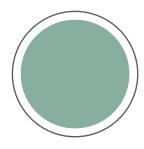
**CLASS GRADE** 

Grade 11

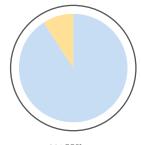
TARGET STUDENTS

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



100% from families with incomes below the local median



9% White 91% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, college counseling

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Two school years, 320 hours of programming

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact on academic achievement and college application of College Possible for students in five high schools in Minneapolis and St. Paul. Outcomes for students randomized to the program are compared to outcomes for students in the comparison group. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 2010-12.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
ACT composite	<b>◊</b>	<b>◊</b>	Grade 11	171	-0.02 (0.15)	
Average effect size for General Achievement outcomes at Tiers I-III						

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
ACT mathematics subtest	<b>◊</b>	<b>◊</b>	Grade 11	171	0.01 (0.15)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.01

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Neverlean of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	Number of students	(Standard error)
ACT English subtest	<b>◊</b>	$\Diamond$	Grade 11	171	0.05 (0.15)
ACT reading subtest	<b>◊</b>	$\Diamond$	Grade 11	171	-0.06 (0.15)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

# Study Details (Continued)

#### **SCIENCE ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site & sample criteria	With site & sample criteria	Group	students	(Standard error)	
ACT science subtest	$\Diamond$	$\Diamond$	Grade 11	171	-0.05 (0.15)	
Average effect size for Science Achievement outcomes at Tiers I-III						

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### **Texas Afterschool Math Remediation**

#### **PROGRAM DESCRIPTION**

The Texas Afterschool Math Remediation Program, offered in one Texas school district during 1999-2002, aimed to increase the mathematics achievement of at-risk ninth grade students. Certified teachers offered individual tutoring, and the program included small peer-study groups focused on specific concepts. The program used the math component of LightSpan Achieve Now software, which offers interactive math games through Sony PlayStation. Students could take PlayStations home to continue the math games. The program was offered four days per week for 1.5 hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Southwest

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grade 9

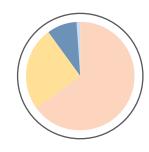
**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS RA

**RACE OR ETHNICITY** 



Not Reported



65% Latino 25% White

9% Black 1% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Tutoring

**BEST PRACTICES USED:** Active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers

**DURATION:** 4 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This study uses a quasi-experimental design to estimate the impact of a voluntary math remediation afterschool program for ninth graders on scores on an Algebra I end-of-course exam and the Algebra I course grade. The study, conducted in a Texas school district, compares outcomes for students who participated in the program during 1999-2002 to a matched sample of at-risk students who did not attend the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evid  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Algebra 1 course grade	§	8	Grade 9	287	-0.02 (0.17)
Algebra 1 end of course exam	§	§	Grade 9	279	0.16 (0.18)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Supplemental Educational Program (Texas)

#### **PROGRAM DESCRIPTION**

This program, offered in one urban school district in Texas in 2006-07, aimed to increase the academic achievement and attendance of low-income, at-risk urban ninth graders. The school-sponsored program provided instruction in social studies as a vehicle through which to address other skills. The program was led by teachers and volunteer tutors from a local university and drew on the Model Lessons Curriculum and exercises from Texas state standardized tests. Activities were hands-on and organized around problem solving. The program was offered for 12 weeks, two days per week, for one hour each day.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Attendance & Enrollment

#### **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for

Other Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

Urban Southwest

#### **Participants**

CLASS GRADE TARGET STUDENTS

Grade 9

Low-Income, Low-Achieving

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



48% Black 36% Latino

48% Black 8% White

8% White 8% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENT: Tutoring

**BEST PRACTICES USED:** Active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Not reported

**STAFFING:** Certified teachers, volunteers

DURATION: 12 weeks, 2 days/week, 1 hour/day

**IMPLEMENTATION SUPPORT:** Program manual, provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of supplemental educational services for ninth graders in one urban school district in Texas. Program participants scored below 70% in reading and social studies for two consecutive six-week periods and had unexcused school lateness and/or absences. Outcomes for participants are compared to outcomes for a matched group of students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during 2006-07.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Number of school days absent	§	§	Grade 9	64	0.11 (0.25)
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **OTHER ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size	
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Evaluator-designed measure of social studies knowledge and skills	§	§	Grade 9	64	-0.63 (0.26)*	
	Average effect size for Other Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

<sup>\*</sup> Statistically significant at p<.05

# Supplemental Educational Services (New Mexico)

#### **PROGRAM DESCRIPTION**

Supplemental Educational Services offered in New Mexico in 2006-07 aimed to increase achievement in math and/or reading for students in low-performing Title I schools. The program consisted of afterschool tutoring and other academic supports in math and/or language arts. Services were offered by 18 state-approved providers, including for-profit and non-profit organizations, that varied in the length of their sessions and the credentials of their tutors.

#### **EFFECTIVENESS AT A GLANCE**

#### **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Rural, Urban

#### REGION



Southwest

#### **Participants**

**CLASS GRADE** 

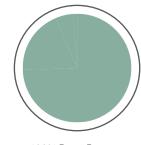
**TARGET STUDENTS** 

**Not Reported** 

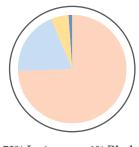
**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



100% Low-Income



73% Latino 1% Black 5% White 19% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Not reported

STAFFING: Certified teachers, program staff

**DURATION:** Full school year, 1-4 days/week, 1-4 hours/day

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on mathematics and reading achievement of supplemental educational services for students in New Mexico. Outcomes for students who participated were compared to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 2006-07.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New Mexico Standards Based Assessment - mathematics	§	§	Not Reported	3,310	-0.26 (0.03)*
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	-0.26

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New Mexico Standards Based Assessment - reading	§	§	Not Reported	3,986	0.06 (0.03)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.



# **Challenging Horizons Program**

The Challenging Horizons Program aimed to support middle school children diagnosed with ADHD and improve their behavior, social skills, and academic outcomes. The program included regular individual meetings with a counselor to set and monitor behavioral and academic goals, a group intervention focused on addressing social impairment, recreational time, education/study skills time, and individual homework help time.	No Effect  Overall, the studies found neither improved nor negative outcomes for  General Achievement  Promotion & Graduation  Social & Emotional Competencies

This review identified two studies of this program. The findings from each of these studies are presented individually on pages 129 - 133 of this evidence guide.

- Evans, S. W., Langberg, J. M., Schultz, B. K., Vaughn, A., Altaye, M., Marshall, S. A., & Zoromski, A. K. (2016).
   Evaluation of a school-based treatment program for young adolescents with ADHD. *Journal of Consulting and Clinical Psychology*, 84, 15-30.
- Molina, B. S. G., Flory, K., Bukstein, O. G., Greiner, A. R., Baker, J. L., Krug, V., & Evans, S. W. (2008). Feasibility and
  preliminary efficacy of an afterschool program for middle schoolers with ADHD: A randomized trial in a large public
  middle school. *Journal of Attention Disorders*, 12(3), 207-217.

# Challenging Horizons Program (Nine Sites)

#### PROGRAM DESCRIPTION

The Challenging Horizons Program, offered in nine middle schools in the Midwest and Southeast, aimed to support middle school children diagnosed with ADHD and improve their behavior, social skills, and academic outcomes. The program included regular individual meetings with a counselor to set and monitor behavioral and academic goals, a group intervention focused on addressing social impairment, recreational time, education/study skills time, and individual homework help time. The program was offered for the full school year, two days per week, 2.25 hours per day. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- General Achievement
- **Promotion & Graduation**
- Social & Emotional Competencies

**NOT MEASURED FOR THIS INTERVENTION: Mathematics** Achievement, Other Achievement, Physical Activity/Health, Reading/ ELA Achievement, Attendance & Enrollment, School Engagement, and Science Achievement

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Rural, Urban

REGION



Midwest & Southeast

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 6-8

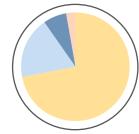
Students Diagnosed with ADHD

#### **SOCIO-ECONOMIC STATUS RACE OR ETHNICITY**





Not Reported



83% White 3% Latino 21% Other 8% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Social skills activities, study skills

BEST PRACTICES USED: Sequenced, active learning, positive adult-student relationships, family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Specialized staffing, volunteers

**DURATION:** Full school year, 2 days/week, 2.25 hours/day

**IMPLEMENTATION SUPPORT:** Program manual, provider

training, ongoing support

#### STUDY DESCRIPTION

The randomized controlled trial estimates the impact of the Challenging Horizons Program for students in grades 6-8 diagnosed with attention deficit hyperactivity disorder. The study was conducted in nine middle schools. Within school and medication status, students were randomly assigned to participate in the Challenging Horizons Program or to experience regular care. The implementation year is not reported.

#### **PROMOTION & GRADUATION**

Outcome	ESSA evid	dence tier		Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Classroom Performance Survey - academic subscale (Brady, Evans, Berlin, Bunford, & Kern, 2012)	$\Diamond$	<b>◊</b>	Grades 6-8	216	0.05 (0.14)
Classroom Performance Survey - academic subscale – six month follow up	$\Diamond$	$\Diamond$	Grades 6-8	216	-0.05 (0.14)
	0.00				

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **SOCIAL & EMOTIONAL COMPETENCIES**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Classroom Performance Survey - interpersonal subscale (Brady, Evans, Berlin, Bunford, & Kern, 2012)	<b>◊</b>	$\Diamond$	Grades 6-8	216	0.03 (0.14)
Classroom Performance Survey - interpersonal subscale – six-month follow-up	<b>◊</b>	$\Diamond$	Grades 6-8	216	-0.09 (0.14)
Social Skills Improvement System - social skills domain (Gresham, Elliott, Vance, & Cook, 2011)	<b>◊</b>	$\Diamond$	Grades 6-8	216	0.02 (0.14)
Social Skills Improvement System - social skills domain – six-month follow-up	<b>◊</b>	$\Diamond$	Grades 6-8	216	0.06 (0.14)
	Average effect size fo	r Social & Emotional Co	mpetencies outcor	nes at Tiers I-III	0.01

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

# Challenging Horizons Program - Northeast

#### **PROGRAM DESCRIPTION**

The Challenging Horizons program, offered in a large public middle school near Pittsburgh, Pennsylvania in 2003, aimed to support middle school children diagnosed with ADHD and improve their behavior, social skills, and academic outcomes. The program included regular individual meetings with a counselor to set and monitor behavioral and academic goals, a group intervention focused on addressing social impairment, recreational time, education/study skills time, and individual homework help time.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for



General Achievement

**NOT MEASURED FOR THIS INTERVENTION: Mathematics** Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

Northeast

#### REGION



**Participants** 

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 6-8

Students Diagnosed with ADHD

#### **SOCIO-ECONOMIC STATUS**

#### **RACE OR ETHNICITY**



Not Reported



48% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Homework help, social skills, study skills

BEST PRACTICES USED: Sequenced, active learning, family engagement, positive adult-student relationships

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Specialized staffing

DURATION: 10 weeks, 2 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of the Challenging Horizons Program for students in grades 6-8 who were, after clinical evaluations, deemed eligible based on their diagnoses of attention deficit hyperactivity disorder and IQs of at least 70. Students were randomly assigned to the treatment or to experience regular care using stratified random assignment by gender and grade. The study was conducted in a large public middle school near Pittsburgh, Pennsylvania during 2003.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Grade point average	$\Diamond$	<b>◊</b>	Grades 6-8	20	0.39 (0.45)
Percentage of course grades C or better	$\Diamond$	<b>◊</b>	Grades 6-8	20	0.70 (0.46)
Percentage of course grades D or better	<b>◊</b>	<b>◊</b>	Grades 6-8	20	0.61 (0.46)
Average effect size for General Achievement outcomes at Tiers I-III					

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

CITATION: Molina, B. S. G., Flory, K., Bukstein, O. G., Greiner, A. R., Baker, J. L., Krug, V., & Evans, S. W. (2008). Feasibility and preliminary efficacy of an afterschool program for middle schoolers with ADHD: A randomized trial in a large public middle school. *Journal of Attention Disorders*, 12(3), 207-217.

# **Quantum Opportunity Program**

#### PROGRAM DESCRIPTION

The Quantum Opportunity Program, offered in seven cities during 1995-2001, aimed to promote high school graduation and postsecondary enrollment among at-risk high school students attending schools with high dropout rates. The program offered case management, financial incentives, and other supportive services that followed students year-round for four years. Afterschool activities included one-on-one tutoring, computer-based instruction, college visits, life skills training, work-readiness training, and community service.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- General Achievement
- Mathematics Achievement
- Promotion & Graduation
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: Other Achievement, Physical Activity/Health, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



West, Midwest, East, Southeast

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grades 9-12

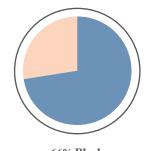
**Low-Achieving Students** 

#### SOCIO-ECONOMIC STATUS RAC

RACE OR ETHNICITY



Not Reported



66% Black 25% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Community service, drug/alcohol awareness, financial incentives, mentoring, tutoring, social skills, study skills

**BEST PRACTICES USED:** Sequenced, active learning, family engagement, positive adult-student relationships, staff-student cultural similarity

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Program staff, specialized staffing

**DURATION:** Four years, over 750 hours/year offered

**IMPLEMENTATION SUPPORT:** Implementation monitoring

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact on high school graduation of the Quantum Opportunity Program for high school students in seven cities (Cleveland, Fort Worth, Houston, Memphis, Philadelphia, Washington, DC, and Yakima). Ninth graders with an eighth grade GPA in the lower two-thirds of the distribution in their school cohort were randomly assigned to participate in the program or to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during 1995-2001.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Grade Point Average	<b>◊</b>	$\Diamond$	Grades 9-12	1,069	Cannot determine
Average effect size for General Achievement outcomes at Tiers I-III					

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
State assessments - mathematics	<b>◊</b>	<b>◊</b>	Grades 9-12	1,069	Cannot determine
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **PROMOTION & GRADUATION**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
High schools credits earned	<b>◊</b>	$\Diamond$	Grades 9-12	766	0.05 (0.07)
High school graduation	<b>◊</b>	$\Diamond$	Grades 9-12	1,069	0.10 (0.06)
Average effect size for <i>Promotion &amp; Graduation</i> outcomes at Tiers I-III					

<sup>◊</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **READING ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
State assessments – reading/ELA	<b>◊</b>	$\Diamond$	Grades 9-12	1,069	Cannot determine
Average effect size for <i>Reading Achievement</i> outcomes at Tiers I-III					

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

**CITATIONS:** Schirm, A., Stuart, E., McKie, A. (2006). *The Quantum Opportunity Program demonstration: Final impacts* (MRP Report No. 8279-932). Washington, DC: Mathematica Policy Research.

Schirm, A., Rodriguez-Planas, N., Maxfield, M., & Tuttle, C. (2003). *The Quantum Opportunity Program demonstration: Short-term impacts* (MPR Report No. 8279-093). Washington, DC: Mathematica Policy Research.

Maxfield, M., Schirm, A., & Rodriguez-Planas, N. (2003). *The Quantum Opportunity Program demonstration: Implementation and short-term impacts* (MPR Report No. 8279-093). Washington, DC: Mathematica Policy Research.

Maxfield, M., Castner, L., Maralani, V., & Vencill, M. (2003). *The Quantum Opportunity Program demonstration: Implementation findings* (MPR Report No. 8279-080). Washington, DC: Mathematica Policy Research.

Arts Programs

# Theater Arts Afterschool Program

#### **PROGRAM DESCRIPTION**

This theater arts afterschool program, offered in Los Angeles, aimed to increase the school engagement and academic performance of underachieving, gifted Latino middle school students. Students created and performed a theatrical adaptation of Shakespeare's Romeo and Juliet. Youth were involved in all aspects of the production including writing, directing, acting, and producing the performance. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Other Achievement
- Reading/ELA Achievement
- Science Achievement

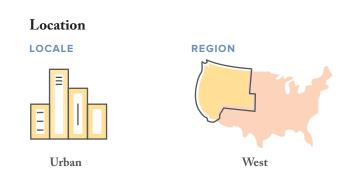
#### **Negative Effects**

The study found at least one negative outcome with no overriding contrary evidence for

School Engagement

NOT MEASURED FOR THIS INTERVENTION: Attendance & Enrollment, General Achievement, Mathematics Achievement, Physical Activity/ Health, Promotion & Graduation, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

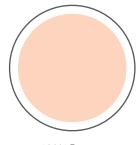
Grades 6-8

Underachieving, Gifted Latino Students

#### SOCIO-ECONOMIC STATUS







Not Reported

100% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Drama, theater

**BEST PRACTICES USED:** Sequenced, active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION: 10 week program** 

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This quasi-experiment compared grades and teacher-reported work habits for a group of gifted, underachieving, Latino middle school students who participated in a theater arts program to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school and community-sponsored afterschool activities. The study was conducted in Los Angeles, California. The implementation year is not reported.

#### **OTHER ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
History course grade	00	œ	Grades 6-8	34	-0.45 (0.35)
Average effect size for Other Achievement outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
English course grade	§	§	Grades 6-8	34	Cannot determine
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					Cannot determine

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SCIENCE ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Science course grade	§	§	Grades 6-8	34	-0.68 (0.35)
Average effect size for Science Achievement outcomes at Tiers I-III					-0.68

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SCHOOL ENGAGEMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
School Attitude Assessment Survey - Revised - Attitudes Towards School subscale	§	§	Grades 6-8	34	0.52 (0.35)
School Attitude Assessment Survey - Revised - Attitudes Towards Teachers subscale	∞	œ	Grades 6-8	34	0.55 (0.35)
School Attitude Assessment Survey - Revised - Goal Valuation subscale	§	§	Grades 6-8	34	0.26 (0.35)
School Attitude Assessment Survey - Revised - Motivation/ Self-Regulation subscale	œ	∞	Grades 6-8	34	0.46 (0.35)
Teacher-reported work habits - English	§	§	Grades 6-8	34	Cannot determine
Teacher-reported work habits - history	§	§	Grades 6-8	34	-0.89 (0.36)*
Teacher-reported work habits - mathematics	§	§	Grades 6-8	34	Cannot determine
Teacher-reported work habits - science	§	§	Grades 6-8	34	0.31 (0.35)
Average effect size for School Engagement outcomes at Tiers I-III					0.20

<sup>\*</sup> Statistically significant at p<.05

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.



# Citizen Schools

#### **PROGRAM DESCRIPTION EFFECTIVENESS AT A GLANCE Positive Effect** Citizen Schools is an afterschool program for low-income, academically struggling middle school Overall, the studies found at least one improved students. The program involves apprenticeships outcome with no overriding contrary evidence for and academic support, including structured Attendance & Enrollment homework help, tutoring support, and academic Mathematics Achievement enrichment. Apprenticeships are the focus of the Promotion & Graduation program: students work with adult volunteers to learn a skill or content area and present what they Reading/ELA Achievement learn in a public showcase. **Mixed Effects** The studies found both improved outcomes and null or negative outcomes School Engagement

This review identified two studies of this program. The findings from each of these studies are presented individually on pages 143 - 148 of this evidence guide.

- Acaira, E., Vile, J., & Reisner, E. R. (2010). Citizen Schools: Achieving high school graduation: Citizen Schools' youth outcomes in Boston. Boston, MA: Policy Studies Associates, Inc.
- Fountain, A. R., Gamse, B., Velez, M., Hillard, M., & Cropper, P. (2016). *Evaluation of Citizen Schools' expanded learning time model: Final report.* Cambridge, MA: Abt Associates.

# Citizen Schools (8th Grade Academy)

#### PROGRAM DESCRIPTION

This Citizen Schools program, offered in Boston in 2001-06, was targeted to low-income, academically struggling middle school students. The program involved apprenticeships and academic support, including structured homework help, tutoring support, and academic enrichment. The Citizen Schools 8th Grade Academy also offered support for students and families in the high school application process, visits to colleges and job sites, and opportunities to develop leadership and personal decision-making skills. This was a full-year program.

#### **EFFECTIVENESS AT A GLANCE**

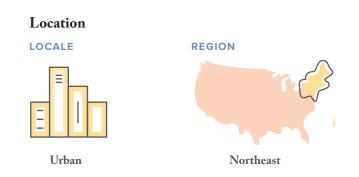
#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- Mathematics Achievement
- Promotion & Graduation
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, School Engagement Science Achievement and Sociel & Emplional Competencies

#### STUDY LOCATION AND PARTICIPANTS



#### **Participants**

**CLASS GRADE** 

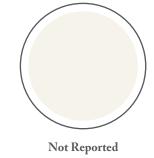
**TARGET STUDENTS** 

Grade 8

Low-Income

#### SOCIO-ECONOMIC STATUS







# ment, Science Achievement, and Social & Emotional Competencies

#### **Program Content**

MAIN COMPONENTS: Apprenticeships, tutoring,

homework help, social skills

**BEST PRACTICES USED:** Sequenced, active learning, positive adult-student relationships, family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff, volunteers

**DURATION:** Full school year, no other info provided

**IMPLEMENTATION SUPPORT:** Provider training,

implementation monitoring

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the Citizen Schools 8th Grade Academy. High school outcomes for students who participated in the program as eighth graders during 2001-06 are compared to outcomes for a matched set of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2001-08.

#### ATTENDANCE & ENROLLMENT

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percentage of school days attended, 9th grade	Tier III	Tier III	Grade 8 participants	350	0.24 (0.11)*
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					0.24

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Earned credit in 9th grade mathematics	Tier III	Tier III	Grade 8 participants	216	0.25 (0.14)*
Passing score on Massachusetts Comprehensive Assessment System (MCAS) - mathematics	§	§	Grade 8 participants	202	0.16 (0.14)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					0.21

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **PROMOTION & GRADUATION**

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)	
On-time promotion to 10th grade	Tier III	Tier III	Grade 8 participants	404	0.26 (0.10)*	
Four-year graduation rate	Tier III	Tier III	Grade 8 participants	116	0.32 (0.19)*	
	Average effect size for <i>Promotion &amp; Graduatio</i> n outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Earned credit in 9th grade English	Tier III	Tier III	Grade 8 participants	221	0.42 (0.14)*
Passing score on Massachusetts Comprehensive Assessment System (MCAS) – English language arts	§	§	Grade 8 participants	202	0.23 (0.14)
	Average effect	size for <i>Reading/ELA A</i>	chievement outcor	mes at Tiers I-III	0.33

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Citizen Schools (35 Schools)

#### PROGRAM DESCRIPTION

This Citizen Schools program, offered at sites in seven states during 2010-14, was targeted to low-income, academically struggling middle school students. The program involved apprenticeships and academic support, including structured homework help, tutoring support, and academic enrichment. Apprenticeships were the focus of the program: students worked with adult volunteers to learn a skill or content area and presented what they learned in a public showcase. The program ran for the full school year, four days per week, 2.5 hours each day.

#### Mixed Effects

The study found a mix of improved outcomes and null or negative outcomes for



School Engagement

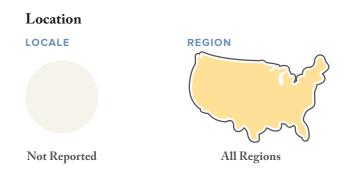
#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Mathematics Achievement

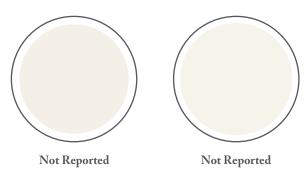
NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, Science Achievement, and Social & Emotional Competencies



#### **Participants**

**CLASS GRADE TARGET STUDENTS** Low-Income, Grades 5-8 Academically Struggling

#### **SOCIO-ECONOMIC STATUS RACE OR ETHNICITY**



#### **Program Content**

MAIN COMPONENTS: Apprenticeships, tutoring, homework help

BEST PRACTICES USED: Sequenced, active learning, positive adult-student relationships, family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff, volunteers

**DURATION:** Full school year, 4 days/week, 2.5 hours/day

IMPLEMENTATION SUPPORT: Program manual, provider

training, ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on academic achievement and school engagement of Citizen Schools for students in grades 5-8. Outcomes for program participants are compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted at sites in seven states in 2010-14.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
State standardized assessments - mathematics	Tier III	Tier III	Grades 5-8	2011-12	Cannot determine*
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	Cannot determine

<sup>\*</sup> Statistically significant at p<.05

#### **SCHOOL ENGAGEMENT**

Outcome	ESSA evid  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)			
Behavioral engagement of peers	Tier III	Tier III	2011-12	299	Cannot determine*			
Behavioral engagement of peers	§	§	2012-13	1004	Cannot determine			
Behavioral misconduct (self report)	§	§	2011-12	299	Cannot determine			
Behavioral misconduct (self report)	§	§	2012-13	1004	Cannot determine			
Perception that teachers care about students	§	§	2011-12	299	Cannot determine			
Perception that teachers care about students	§	§	2012-13	1004	Cannot determine			
Social engagement	§	§	2011-12	299	Cannot determine			
Social engagement	§	§	2012-13	1004	Cannot determine			
	Average effect size for School Engagement outcomes at Tiers I-III							

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Stay-in-School for College and Career Opportunities (SISCO)

#### PROGRAM DESCRIPTION

Stay-in-School for College and Career Opportunities (SISCO), offered in one school district in 2011-13, aimed to promote academic success, social and emotional learning, and college and career readiness for low-income Latino middle school students. Program activities included tutoring and academic enrichment in literacy, math, and science. In addition, the program offered career exploration activities, high school visits, parent-student workshops, and summer programming. The program addressed social and emotional learning through a curriculum developed by ASPIRA, a national Latino educational organization. The program was offered for ten weeks, two days per week, one hour each day.

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- **Promotion & Graduation**

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/ Health, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### Location

LOCALE



Urban



Midwest

#### **Participants**

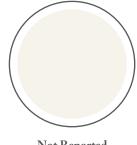
**CLASS GRADE** 

**TARGET STUDENTS** 

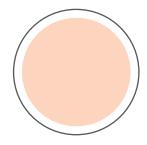
Grades 6-8

Latino Students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



100% Latino

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

BEST PRACTICES USED: Family engagement, respect

for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers, volunteers

DURATION: 10 weeks, 2 days/week, 1 hour/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

The quasi-experiment estimates the impact of the Stay-in-School for College and Career Opportunities (SISCO). Outcomes for Latino middle school students (mostly in grades 7-8) who participated in SISCO for two years (2011-12 and 2012-13) are compared to outcomes for a matched comparison group of Latino middle school students who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Number of school days attended	Tier III	Tier III	Grades 6-8	112	0.50 (0.19)*
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **PROMOTION & GRADUATION**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Promotion to the next grade	Tier III	Tier III	Grades 6-8	112	0.50 (0.19)*	
	Average effect size for <i>Promotion &amp; Graduation</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

### **After School Matters**

#### PROGRAM DESCRIPTION

After School Matters, offered in Chicago Public Schools, aimed to increase low-income urban adolescents' knowledge of workplace culture and improve their soft skills through paid apprenticeships. Apprenticeships varied but were focused in particular areas and guided by instructors who provided information and feedback to students regarding workplace standards and culture. Instructors were not certified teachers but had expertise in the field of the apprenticeship. The implementation year is not reported.

#### EFFECTIVENESS AT A GLANCE

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



#### No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- General Achievement
- Promotion & Graduation

NOT MEASURED FOR THIS INTERVENTION: Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

Midwest

#### **Participants**

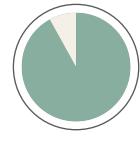
Urban

CLASS GRADE TARGET STUDENTS

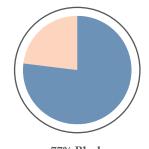
Grades 9-12

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



92% Low-Income



77% Black 23% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Apprenticeships

**BEST PRACTICES USED:** Sequenced, active learning

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: 10 weeks in fall and spring, 3 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This quasi-experiment, originally designed as a randomized controlled trial, estimates the impact of After School Matters for students in grades 9-12 in Chicago Public Schools. Outcomes for participants were compared to those for non-participants, many of whom participated in afterschool activities or held jobs after school. The implementation year is not reported.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Percentage of school days attended	00	œ	Grades 9-12	193	0.09 (0.15)	
Average effect size for Attendance & Enrollment outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
GPA	§	8	Grades 9-12	462	-0.05 (0.09)	
	Average effect size for General Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **PROMOTION & GRADUATION**

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Number of courses failed	§	§	Grades 9-12	462	-0.01 (0.09)		
	Average effect size for <i>Promotion &amp; Graduation</i> outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **PROMOTION & GRADUATION**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Identification with School Questionnaire	Tier III	Tier III	Grades 9-12	365	0.23 (0.11) *	
	Average effect size for School Engagement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

# Hispanic Youth Leadership Program

#### PROGRAM DESCRIPTION

The Hispanic Youth Leadership Program, offered in one school district in 2011-13, aimed to provide low-income Latino high school students with leadership skills and social and emotional learning competencies to promote positive decision-making. The program engaged youth in service learning and drew on a curriculum developed by ASPIRA, a national Latino education organization, to teach leadership, career exploration, cultural enrichment, and social and emotional learning competencies. Homework help and tutoring were also offered.

#### EFFECTIVENESS AT A GLANCE

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- Promotion & Graduation

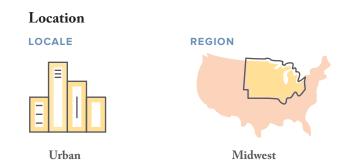
#### No Effect

The study found neither improved nor negative outcomes for

General Achievement

NOT MEASURED FOR THIS INTERVENTION: Mathematics Achievement, Other Achievement, Physical Activity/Health, Reading/ ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



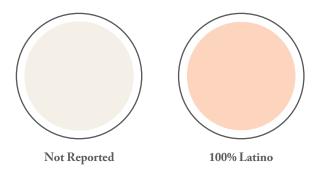
#### **Participants**

CLASS GRADE TARGET STUDENTS

Grades 9-12

Latino students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Tutoring** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers, volunteers

DURATION: 10 weeks, 3 days/week, 2-2.5 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the Hispanic Youth Leadership Program (HYLP). Outcomes for high school students who participated in HYLP for two years, 2011-12 and 2012-13, are compared to outcomes for a matched comparison group of Latino high school students who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Number of school days attended	Tier III	Tier III	Grades 9-12	76	0.62 (0.23)*
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
GPA	§	§	Grades 9-12	76	0.32 (0.23)	
	Average effect size for General Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **PROMOTION & GRADUATION**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
High school graduation	Tier III	Tier III	Grades 9-12	34	1.43 (0.38)*	
Promotion to the next grade	§	§	Grades 9-12	37	0.26 (0.34)	
	Average effect size for <i>Promotion &amp; Graduation</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet ESSA Tier III because there is not a statistically significant improvement in the outcome. **CITATION:** Perry, J. C., & Shannon, L. (2017). How vocational psychologists can make a difference in K-12 education. *International Journal of Educational and Vocational Guidance*, 17, 97-115.

# **LEAD Academy**

LEAD (Leadership Education and Development) Academy, offered at one school in an urban district in New Jersey in 2005-06, aimed to improve conduct and promote leadership among academically at-risk fourth and fifth grade students. The program used a leadership curriculum (developed by the provider) that involved work stations focused on leadership skills. Small groups of students rotated through the work stations over a period of three weeks. Teachers, community leaders, entrepreneurs, and other guest speakers staffed the program. The program was offered for three weeks, five days per week.

#### **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for



Social & Emotional Competencies

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, and Science Achievement

#### Location

LOCALE



Urban

### REGION



Northeast

#### **Participants**

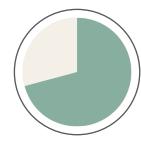
**CLASS GRADE** 

**TARGET STUDENTS** 

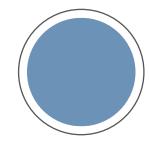
Grade 5

**Low-Achieving Students** 

#### **SOCIO-ECONOMIC STATUS** RACE OR ETHNICITY



71% Low-Income



100% Black

#### **Program Content**

MAIN COMPONENTS: Social skills activities

**BEST PRACTICES USED:** Active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, specialized staffing, program staff

**DURATION:** 3 weeks, 5 days/week

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the Leadership Education and Development Academy (LEAD Academy) for fifth graders identified as being academically at risk. The program was offered at one school in an urban district in New Jersey, and students at a second school served as the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2005-06.

#### **SOCIAL & EMOTIONAL COMPETENCIES**

	ESSA evid	ESSA evidence tier		Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Leadership Skills Inventory: Decision Making (Karnes & Chauvin, 2000)	§	§	Grade 5	34	-1.08 (0.37)*		
Leadership Skills Inventory: Problem Solving (Karnes & Chauvin, 2000)	∞	∞	Grade 5	34	-1.24 (0.38)*		
Leadership Skills Inventory: Written Communication (Karnes & Chauvin, 2000)	§	§	Grade 5	34	-1.20 (0.37)*		
	Average effect size for Social & Emotional Competencies outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Time Travelers Leadership Program

#### PROGRAM DESCRIPTION

The Time Travelers Leadership Program, offered at one school in a suburban district in 2009-10, aimed to increase the school engagement, academic performance, and behavior of a diverse group of at-risk seventh grade students. The key components of the program focused on college and career preparation, leadership, and service. Extracurricular activities and homework help were also offered. The program was led by school teachers who received professional development on increasing school engagement. The program was offered for the full school year, two days per week, 2.5 hours each day.

#### No Effect

The study found neither improved nor negative outcomes for

General Achievement

**NOT MEASURED FOR THIS INTERVENTION: Mathematics** Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### Location

LOCALE



Suburban

# REGION

Midwest

#### **Participants**

**CLASS GRADE** 

Grade 7

**TARGET STUDENTS** 

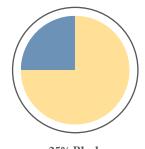
Students recommended by their teachers for academic or behavioral intervention

#### **SOCIO-ECONOMIC STATUS**

**RACE OR ETHNICITY** 



69% Low-Income



25% Black 75% White

#### **Program Content**

MAIN COMPONENTS: Service, extracurriculars,

homework help

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers

DURATION: Full school year, 2 days/week, 2.5 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experimental study estimates the impact of the Time Travelers Leadership Program (TTLP) on student GPA. Outcomes for participants are compared to outcomes for a matched group of students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in one school in a suburban district in the Midwest during 2009-10.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
GPA	00	œ	Grade 7	26	0.01 (0.40)	
	Average effect size for General Achievement outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Ellas/Ellos Mentoring Program

The Ellas/Ellos program, offered in one school district in 2011-13, was a career-focused mentoring program for Latino middle and high school students. Mentoring took place in individual as well as group formats. Group mentoring was gender-specific and involved guest speakers and participation in leadership and community service projects. Mentors were assigned to youth based on their career and other interests.

#### **Participants**

Location

LOCALE

**CLASS GRADE** 

Urban

Grades 9-12

**TARGET STUDENTS** 

Midwest

REGION

Latino Students

#### No Effect

The study found neither improved nor negative outcomes for

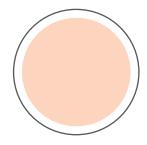
- Attendance & Enrollment
- General Achievement
- Promotion & Graduation

**NOT MEASURED FOR THIS INTERVENTION: Mathematics** Achievement, Other Achievement, Physical Activity/Health, Reading/ ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY







100% Latino

#### **Program Content**

MAIN COMPONENTS: Tutoring, mentoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers, volunteers

**DURATION:** 4 individual sessions/month for 1 hour, 1 group

session/month for 2.5 hours

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

The quasi-experiment estimates the impact of a mentoring program for Latino high school students. Outcomes for Latino high school students who participated in mentoring for two years (2011-12 and 2012-13) are compared to a matched comparison group of students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Number of school days attended	§	§	Grades 9-12	38	0.46 (0.33)		
	Average effe	Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **GENERAL ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
GPA	§	§	Grades 9-12	38	-0.06 (0.32)	
	Average effect size for General Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **PROMOTION & GRADUATION**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
High school graduation	§	§	Grades 9-12	21	0.66 (0.45)
Promotion to the next grade	§	§	Grades 9-12	18	0.48 (0.48)
	Average eff	ect size for <i>Promotion</i> &	<i>Graduation</i> outcor	nes at Tiers I-III	0.57

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

CITATION: Perry, J. C., & Shannon, L. (2017). How vocational psychologists can make a difference in K-12 education. *International Journal of Educational and Vocational Guidance*, 17, 97-115.

Multicomponent Programs

# 21st Century Community Learning Centers (Fresno)

The Fresno, California County Office of Education's afterschool programs, offered from 2011-13, aimed to improve the academic performance of low-income students in grades 3-6. Programs included multiple types of academic assistance: tutoring, homework help, and instruction designed to reinforce school day activities. Bilingual academic support was also available. Enrichment activities, which rotated every six weeks, were aligned to student interests. The program was offered for the full school year.

#### **EFFECTIVENESS AT A GLANCE**

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### Location

LOCALE



Suburban, Rural, Urban

# REGION



West

#### **Participants**

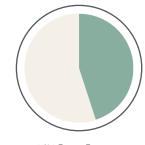
**CLASS GRADE** 

**TARGET STUDENTS** 

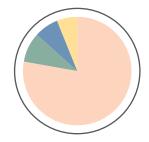
Grades 3-6

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



45% Low-Income



77% Latino 9% Asian 6% White 7% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help,

enrichment activities

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers

**DURATION:** Full school year, no other info provided

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experimental study estimates the impact of 21st Century Community Learning Center afterschool programs in Fresno, California, offered during 2011-13. The study compared outcomes for students who participated frequently in the afterschool programs to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
California Standards Test - mathematics	Tier III	Tier III	2013	2,084	0.18 (0.04)*
California Standards Test - mathematics	Tier III	Tier III	2012	1,130	0.22 (0.06)*
	Average effec	t size for Mathematics A	chievement outcor	mes at Tiers I-III	0.20

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California English Language Development Test	§	§	2012	402	0.11 (0.10)
California Standards Test - English language arts	§	§	2012	1,130	0.08 (0.06)
California Standards Test - English language arts	§	§	2013	2,084	0.02 (0.04)
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	0.07

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# 21st Century Community Learning Centers (Philadelphia - Elementary)

#### **PROGRAM DESCRIPTION**

These 21st Century Community Learning Center programs, offered in Philadelphia in 2012-13, provided academic support and other enrichment activities such as athletics, art and music, recreation, and career and technical education. The aim was to improve academic and behavioral outcomes of low-income youth attending high-poverty, low-performing schools. The programs were offered for the full school year, five days per week, for up to three hours per day.

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION Urban Northeast

#### EFFECTIVENESS AT A GLANCE

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



#### **Mixed Effects**

This study found a mix of both improved and negative or null outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Science Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

Grades 1-5

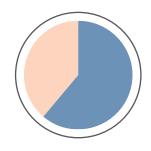
TARGET STUDENTS

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



84% Low-Income



52% Black 33% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Arts, tutoring, homework help, academic enrichment, sports/recreation, mentoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: Full school year, 5 days/week, 2.5-3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool programs in Philadelphia offered by six 21st Century Community Learning Center grantees. Outcomes for participants who attended at least 30 days of the program are compared to outcomes for students who did not participate or who participated for fewer than 30 days. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during 2012-13.

#### **ATTENDANCE & ENROLLMENT**

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and  sample criteria	Group	Number of students	Effect size (Standard error)	
10 or more unexcused absences – 2012-13	Tier III	Tier III	Grades 1-5	Cannot determine	Cannot determine*	
10 or more unexcused absences – 2011-12	§	§	Grades 1-5	Cannot determine	Cannot determine	
	Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Grade of C or higher in mathematics –2012-13	§	§	Grades 1-5	Cannot determine	Cannot determine		
Mathematics course grade – 2011-12	§	§	Grades 1-5	1,051	Cannot determine		
Pennsylvania State System of Assessment – mathematics – 2011-12	§	§	Grades 1-5	Cannot determine	Cannot determine		
Pennsylvania State System of Assessment - mathematics – 2012-13	Tier III	Tier III	Grades 1-5	450	Cannot determine*		
	Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Developmental Reading Assessment: At grade level – 2012-13	§	§	Grades 1-5	Cannot determine	Cannot determine
Grade of C or higher in reading – 2011-12	Tier III	Tier III	Grades 1-5	Cannot determine	Cannot determine*
Pennsylvania State System of Assessment – reading – 2012-13	§	§	Grades 1-5	453	Cannot determine
Pennsylvania State System of Assessment – reading – 2011-12	§	§	Grades 1-5	Cannot determine	Cannot determine
Reading course grade- 2012-13	§	§	Grades 1-5	1,051	Cannot determine
	Average effect	size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	Cannot determine

<sup>\*</sup> Statistically significant at p<.05

#### **SCIENCE ACHIEVEMENT**

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Pennsylvania State System of Assessment – science – 2012-13	§	§	Grades 1-5	265	Cannot determine
Science course grade – 2012-13	§	§	Grades 1-5	1,051	Cannot determine
	Average	effect size for <i>Science A</i>	chievement outcor	mes at Tiers I-III	Cannot determine

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

CITATIONS: Gao, J., Hallar, B., & Hartmann, T. A. (2014). A snapshot of OST programs in Philadelphia: An evaluation of eleven 21st Century Community Learning Center grantees. Philadelphia, PA: Research for Action.

Hartmann, T. A., Gao, J., Kumar, A., & Edmunds, K. (2013). A snapshot of OST programming in Philadelphia: An evaluation of six 21st Century Community Learning Center grantees. Philadelphia, PA: Research for Action.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# After School Education and Safety (California - Elementary)

#### PROGRAM DESCRIPTION

The After School Education and Safety programs, offered in 2006-11 and funded by the State of California, were designed to provide academic support and a safe environment after school for students in kindergarten through ninth grade. Sites provided both academic and non-academic enrichment, with specific activities varying across sites. Almost all sites reported offering physical fitness/sports and arts/music. The programs were offered for the full school year, with the number of hours varying by program.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- Physical Activity/Health

#### **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for

- Mathematics Achievement
- Reading/ELA Achievement

**NOT MEASURED FOR THIS INTERVENTION:** General Achievement, Other Achievement, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION Urban West

#### **Participants**

**CLASS GRADE** 

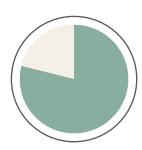
TARGET STUDENTS

RACE OR ETHNICITY

Grades 3-5

Low-Income

#### SOCIO-ECONOMIC STATUS





67% Latino 13% White 11% Black 8% Asian 2% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Homework help, arts/music, nutrition/health, physical fitness/sports, social skills, tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff, volunteers

**DURATION:** Full school year, number of hours varies by program

**IMPLEMENTATION SUPPORT:** Provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on academic achievement and attendance of the After School Education and Safety programs for students in California. Outcomes for participants were compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted from 2006-11.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percentage of days attended	Tier III	Tier III	Grades 3-5	248,820	0.08 (0.004)*
	0.08				

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test - mathematics	§	§	Grades 3-5	358,508	-0.01 (0.003)*
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

 $<sup>\</sup>S$  Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evid	dence tier		Number of students	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group		(Standard error)
Abdominal Strength	Tier III	Tier III	Grades 3-5	109,386	0.04 (0.006)*
Aerobic Capacity	Tier III	Tier III	Grades 3-5	109,386	0.08 (0.006)*
Body Composition	Tier III	Tier III	Grades 3-5	109,386	0.03 (0.006)*
Flexibility	Tier III	Tier III	Grades 3-5	109,386	0.03 (0.006)*
Trunk Strength	Tier III	Tier III	Grades 3-5	109,386	0.04 (0.006)*
Upper Body Strength	§	§	Grades 3-5	109,386	0.009 (0.006)
	Average eff	fect size for <i>Physical Act</i>	<i>ivity/Health</i> outcon	nes at Tiers I-III	0.04

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test – English language arts	§	§	Grades 3-5	358,699	-0.04 (0.003)*
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

CITATIONS: Huang, D., & Wang, J. (2012). Independent statewide evaluation of ASES and 21st CCLC afterschool programs: May 1, 2008-December 31, 2011 (Report No. CDE4/CN077738/2011). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Center for the Study of Evaluation, Graduate School of Education and Information Studies, University of California, Los Angeles.

Huang, D., Silver, D., Cheung, M., Duong, M., Gualpa, A., Hodson, C., . . ., Vazquez, V. (2011). *Independent statewide evaluation of after school programs* (CRESST Report No. 789). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# **Baltimore Community Schools (Elementary)**

#### PROGRAM DESCRIPTION

Baltimore Community Schools programs, offered in 2012-14, took place at community schools serving low-income students in grades K-12. The programs were intended to promote academic success, health, social and emotional development, high school graduation, and college and career readiness. Programs were provided by various types of organizations and offered academic support, recreation, and arts and sports activities. The programs were offered for the full school year, up to five days per week, for up to 4.5 hours per day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Attendance & Enrollment

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

### Location

LOCALE



#### REGION



#### **Participants**

**CLASS GRADE** 

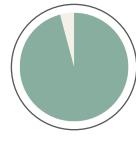
**TARGET STUDENTS** 

Grades K-5

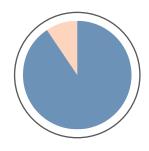
Low-Income

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



96% Low-Income



87% Black 9% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, homework help

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Full school year, up to 5 days/week, 3-4.5 hours/day

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool programs in community schools administered by the Family League of Baltimore. Outcomes for students who attended afterschool programs for at least 200 hours were compared to outcomes for students who did not attend the programs and did not attend a community school. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2012-14.

#### **ATTENDANCE & ENROLLMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Chronic absenteeism	Tier III	Tier III	K-5th graders– 2011-12	2,584	0.53 (0.04)*
Chronic absenteeism	Tier III	Tier III	K-5th graders (new attendees)– 2012-13	3,192	0.15 (0.04)*
Chronic absenteeism (>20 days absent)	Tier III	Tier III	K-5th graders (new attendees)– 2013-14	1,702	0.35 (0.05)*
Chronic absenteeism	Tier III	Tier III	K-5th graders (2-yr attendees)– 2013-14	1,472	0.28 (0.05)*
Percentage of school days attended	Tier III	Tier III	K-5th graders– 2011-12	2,584	Cannot determine*
Percentage of school days attended	Tier III	Tier III	K-5th graders (new attendees)– 2011-12	3,192	Cannot determine*
Percentage of school days attended	Tier III	Tier III	K-5th graders (new attendees)– 2013-14	1,702	Cannot determine*
Percentage of school days attended	Tier III	Tier III	K-5th graders (2-yr attendees)– 2013-14	1,472	Cannot determine*
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

CITATIONS: Olson, L. S. (2014). A first look at community schools in Baltimore. Baltimore, MD: Baltimore Education Research Consortium.

Olson, L. S., Connolly, F., & Kommajesula, A. H. (2013). Family League 2011-12 out of school time programs in Baltimore city. Baltimore, MD: Baltimore Education Research Consortium.

# LA's Better Educated Students for Tomorrow (LA's BEST)

#### **PROGRAM DESCRIPTION**

LA's BEST (Better Educated Students for Tomorrow) aimed to increase academic achievement and improve the interpersonal skills and self-esteem of elementary school children in high-crime, high-poverty areas in Los Angeles Unified School District. The programs included homework help and tutoring, other academically-oriented activities, sports and recreation, performing and visual arts, community and cultural activities, and health and nutrition programming.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

Overall, the studies found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

Overall, the studies found neither improved nor negative outcomes for

- Reading/ELA Achievement
- Other Achievement
- Science Achievement

This review of LA's BEST identified six studies of this program. The findings from each of these studies are presented individually on pages 174 – 182 of this evidence guide.

- Chinen, M. H. (2010). The effects of afterschool program
   participation on mathematics achievement: The case of
   LA's BEST (Doctoral dissertation, University of California, Los
   Angeles). Retrieved from ProQuest Dissertations and Theses
   Database (UMI No. 3450983)
- Goldschmidt, P., & Huang, D. (2007). The long-term effects
  of afterschool programming on educational adjustment
  and juvenile crime: A study of the LA's BEST afterschool
  program (CRESST Report). Los Angeles, CA: National Center
  for Research on Evaluation, Standards and Student Testing,
  Graduate School of Education and Information Studies,
  University of California, Los Angeles.
- Huang, D., Leon, S., Harven, A. M., La Torre, D., & Mostafavi, S. (2009). Exploring the relationship between LA's BEST program attendance and cognitive gains of LA's BEST students (CRESST Report No. 757). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

- Huang, D., Kim, K. S., Marshall, A., & Pérez, P. (2005).
   Keeping kids in school: An LA's BEST example. A study examining the long-term impact of LA's BEST on students' dropout rates (CRESST Report). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.
- Huang, D., La Torre, D., Leon, S., Duong, N., & Hodson,
  C. (2011). Supporting student success in middle schools:
   Examining the relationship between elementary afterschool program participation and subsequent middle school attainments (CRESST Report). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.
- Huang, D., Leon, S., La Torre, D., & Mostafavi, S. (2008).
   Examining the relationship between LA's BEST program attendance and academic achievement of LA's BEST students (CRESST Report No. 749). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

# LA's Better Educated Students for Tomorrow (LA's BEST – 1993-98)

#### **PROGRAM DESCRIPTION**

LA's BEST (Better Educated Students for Tomorrow), offered at 24 Los Angeles schools in 1993-98, aimed to increase academic achievement and improve the interpersonal skills and self-esteem of elementary school children in high-crime, high-poverty areas in Los Angeles Unified School District. The programs included homework help and tutoring, other academically-oriented activities, sports and recreation, performing and visual arts, community and cultural activities, and health and nutrition programming. The programs were offered for the full school year, five days per week.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



#### **Participants**

**CLASS GRADE** 

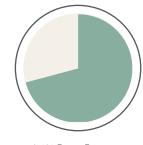
Grades 2-5

TARGET STUDENTS

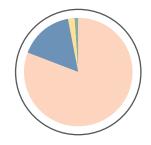
Low-Income

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



71% Low-Income



81% Latino 16% Black

2% White 1% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help, academic enrichment, sports/recreation, arts and cultural activities, health and nutrition education

**BEST PRACTICES USED:** Active learning, positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, 5 days/week

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This study uses a quasi-experimental design to estimate the academic impacts of attending the LA's BEST afterschool program during elementary school. The study examines reading and math achievement scores in 1998-99 (the start of middle school) among students who were in the second or third grade in the 1993-94 academic year. Outcomes for students who attended LA's BEST program for at least one year during elementary school are compared to outcomes for students in the same grade and school who did not attend the LA's BEST program during any elementary school year. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 24 schools.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Stanford Achievement Test 9 – mathematics	§	§	Grades 2-5	4,662	Cannot determine
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Stanford Achievement Test 9 – reading comprehension	§	§	Grades 2-5	4,662	Cannot determine
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATIONS:** Goldschmidt, P., & Huang, D. (2007). *The long-term effects of afterschool programming on educational adjustment and juvenile crime: A study of the LA's BEST afterschool program* (CRESST Report). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

Huang, D., Kim, K. S., Marshall, A., & Pérez, P. (2005). Keeping kids in school: An LA's BEST example. A study examining the long-term impact of LA's BEST on students' dropout rates (CRESST Report). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

# LA's Better Educated Students for Tomorrow (LA's BEST – 2001-04)

#### **PROGRAM DESCRIPTION**

LA's BEST (Better Educated Students for Tomorrow), offered in 84 Los Angeles schools in 2001-04, aimed to increase academic achievement and improve the interpersonal skills and self-esteem of elementary school children in high-crime, high-poverty areas in Los Angeles Unified School District. The programs included homework help and tutoring, other academically-oriented activities, sports and recreation, performing and visual arts, community and cultural activities, and health and nutrition programming. The programs were offered for the full school year, five days per week, three hours per day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



**Mathematics Achievement** 

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### Location

LOCALE



Urban



West

#### **Participants**

**CLASS GRADE** 

Grades 3-4

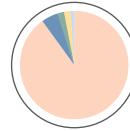
**TARGET STUDENTS** 

RACE OR ETHNICITY

Low-Income

#### **SOCIO-ECONOMIC STATUS**

71% Low-Income



90% Latino 2% White 5% Black

2% Asian

1% Other

PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help, academic enrichment, sports/recreation, arts and cultural activities, health and nutrition education

**BEST PRACTICES USED:** Positive adult-student relationships

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff, volunteers

DURATION: Full school year, 5 days/week, 3 hours/day

IMPLEMENTATION SUPPORT: Program manual, provider

training, ongoing support

#### STUDY DESCRIPTION

This quasi-experimental study estimates the impact of the LA's BEST afterschool program for third and fourth grade students. Outcomes for program participants were compared to those who did not attend the program. The programs were offered for the full school year, five days per week. The study was conducted in 84 Los Angeles schools during 2001-04.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test – mathematics – 2001-02	∞	œ	Grade 3	740	-0.01 (0.07)
California Standards Test – mathematics – 2002-03	∞	∞	Grade 3	642	-0.01 (0.08)
California Standards Test – mathematics – 2003-04	∞	∞	Grade 3	340	-0.02 (0.11)
California Standards Test – mathematics – 2001-02	∞	∞	Grade 4	256	-0.07 (0.13)
California Standards Test – mathematics- 2002-03	∞	œ	Grade 4	358	0.00 (0.11)
California Standards Test – mathematics- 2003-04	Tier II	Tier III	Grade 4	294	0.23 (0.12) *
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

 $<sup>{\</sup>color{blue} {}^{\infty}} \ \text{Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.}$ 

# LA's Better Educated Students for Tomorrow (LA's BEST – 2004-07)

#### **PROGRAM DESCRIPTION**

LA's BEST (Better Educated Students for Tomorrow), offered in Los Angeles in 2004-07, aimed to increase academic achievement and improve the interpersonal skills and self-esteem of elementary school children in high-crime, high-poverty areas in Los Angeles Unified School District. The programs included homework help and tutoring, other academically-oriented activities, sports and recreation, performing and visual arts, community and cultural activities, and health and nutrition programming. The program was offered for the full school year, five days per week.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effects

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



#### **Participants**

**CLASS GRADE** 

Grades 3-5

TARGET STUDENTS

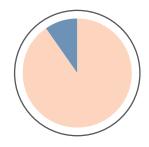
Low-Income

#### SOCIO-ECONOMIC STATUS

**RACE OR ETHNICITY** 



40% of parents had less than high school education



90% Latino 5% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help, academic enrichment, sports/recreation, arts and cultural activities, health and nutrition education

**BEST PRACTICES USED:** Active learning, positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, 5 days/week

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This study uses a quasi-experimental design to estimate the impacts of participating in LA's BEST during third through fifth grade on math and reading achievement scores. The comparison group was students who participated in LA's BEST during second grade but not in third through fifth grade. The study was conducted in 2004-07.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	SA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test - mathematics	∞	∞	Grades 2-5	5,793	0.04 (0.04)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test - reading	00	œ	Grades 2-5	5,772	-0.04 (0.04)
	-0.04				

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

CITATIONS: Huang, D., Leon, S., La Torre, D., & Mostafavi, S. (2008). Examining the relationship between LA's BEST program attendance and academic achievement of LA's BEST students (CRESST Report No. 749). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

Huang, D., Leon, S., Harven, A. M., La Torre, D., & Mostafavi, S. (2009). Exploring the relationship between LA's BEST program attendance and cognitive gains of LA's BEST students (CRESST Report No. 757). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

# LA's Better Educated Students for Tomorrow (LA's BEST – Long-Term Effects)

#### **PROGRAM DESCRIPTION**

LA's BEST (Better Educated Students for Tomorrow) aimed to increase academic achievement and improve the interpersonal skills and self-esteem of elementary school children in high-crime, high-poverty areas in Los Angeles Unified School District. The programs included homework help and tutoring, other academically-oriented activities, sports and recreation, performing and visual arts, community and cultural activities, and health and nutrition programming.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



#### No Effect

The study found neither improved nor negative outcomes for

- Science Achievement
- Reading/ELA Achievement
- Other Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, and Social & Emotional Competencies

# Location LOCALE REGION Urban West

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grade 3

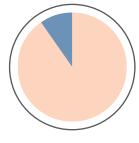
Low-Income

#### SOCIO-ECONOMIC STATUS









85% Latino 9% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help, academic enrichment, sports/recreation, arts and cultural activities, health and nutrition education

**BEST PRACTICES USED:** Active learning, positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, 5 days/week

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This study uses a quasi-experimental design to estimate the impacts of participating in LA's BEST during third grade on course grades and achievement in eighth grade. The comparison group was students who did not participate in LA's BEST during third grade. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2004-07.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Grade 8 California Standards Test – math- ematics	Tier III	Tier III	Grade 3 cohort	9,455	Cannot determine*		
Grade 8 California Standards Test - algebra	§	§	Grade 3 cohort	9,455	Cannot determine		
Grade 8 Algebra GPA	§	§	Grade 3 cohort	12,756	Cannot determine		
Grade 8 General mathematics GPA	Tier III	Tier III	Grade 3 cohort	12,756	Cannot determine*		
	Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

#### **OTHER ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Grade 8 history course grade	§	§	Grade 3 cohort	12,756	Cannot determine		
	Average effect size for Other Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Grade 8 California Standards Test - English language arts	§	§	Grade 3 cohort	9,455	Cannot determine
Grade 8 English language arts course grade	§	§	Grade 3 cohort	12,756	Cannot determine
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SCIENCE ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Grade 8 science course grade	§	§	Grade 3 cohort	12,756	Cannot determine
	Average	effect size for <i>Science A</i>	chievement outco	mes at Tiers I-III	Cannot determine

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Multicomponent Program (Northeast)

This afterschool program, offered during 2002-04 in three public schools in economically disadvantaged communities in the Northeast, aimed to provide a safe environment and promote academics, social skills, and physical health to students in grades 1-3. Programming involved a mix of homework help, enrichment activities (e.g., computers, visitors, musical instruments), recreational activities (e.g., sports, board games), and art. The program was offered for the full school year, five days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Physical Activity/Health
- Social & Emotional Competencies

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, and Science Achievement

#### Location

LOCALE



Urban

REGION



Northeast

#### **Participants**

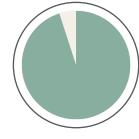
**CLASS GRADE** 

**TARGET STUDENTS** 

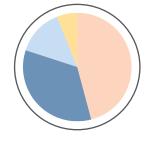
Grades 1-3

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



95% Low-Income



46% Latino 6% White 34% Black 14% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Arts, sports, homework help

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impacts of an afterschool program for first through third graders at three schools in the Northeast. Outcomes for "regular participants" (those who attended the program three days per week on average) were compared to outcomes for those who did not attend, or "sporadic attenders." The study was conducted in 2002-03 and 2003-04.

#### PHYSICAL ACTIVITY/HEALTH

Outcome	ESSA evidence without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)	
Body mass index	Tier III	Tier III	Grades 1-3	364	Cannot determine*	
Obesity (>=95th percentile BMI)	Tier III	Tier III	Grades 1-3	364	0.22 (0.11)*	
	Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **SOCIAL & EMOTIONAL COMPETENCIES**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Interpersonal Competence Scale (teacher rating)	Tier III	Tier III	Grades 1-3	362	Cannot determine*
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	Cannot determine

<sup>\*</sup> Statistically significant at p<.05

## Tutoring and Enrichment Program

#### PROGRAM DESCRIPTION

This tutoring and enrichment program, offered in one elementary school in the Southeast in 2005-06, aimed to improve the academic performance, behavior, and attitude of low-achieving elementary school students. Participants received individual and small-group tutoring and participated in enrichment activities such as dance and music. Tutors were volunteers from a local university. The program was offered for 12 weeks, four days per week, 1.75 hours per day.

#### EFFECTIVENESS AT A GLANCE

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



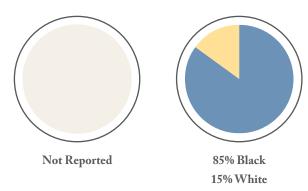
#### **Participants**

CLASS GRADE TARGET STUDENTS

Grades 3-5

Low-Achieving Students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, enrichment activities

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Not reported

**DURATION:** 12 weeks, 4 days/week, 1.75 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of this afterschool program in one elementary school in the Southeast, for students who scored below proficient on standardized tests. The comparison group is comprised of students who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2005-06.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Mathematics course grade	Tier III	Tier III	Grades 3-5	20	1.10 (0.48)*		
	Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Reading course grade	∞	œ	Grades 3-5	20	0.94 (0.47)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

## 21st Century Community Learning Centers (Marietta Boys and Girls Club)

#### **PROGRAM DESCRIPTION**

The Marietta Boys and Girls Club's 21st Century Community Learning Center program, offered in one school, aimed to help low-income seventh and eighth grade students reach proficiency in mathematics or reading. The program, a collaboration between the Marietta, Georgia Public Schools and the Club, provided remedial academic support as well as enrichment to prepare for standardized tests. The program also offered personal growth and social development opportunities and encouraged family involvement in education activities. The program was offered for the full school year, five days per week, two hours each day.

#### EFFECTIVENESS AT A GLANCE

#### **Mixed Effects**

The study found a mix of improved outcomes and null or negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

# REGION

Southeast

#### **Participants**

**CLASS GRADE** 

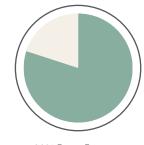
Grades 7-8

**TARGET STUDENTS** 

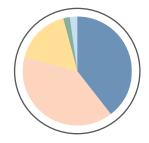
Low-Income, Low-Achieving

#### SOCIO-ECONOMIC STATUS

#### RACE OR ETHNICITY



80% Low-Income



40% Black 40% Latino 17% White 2% Asian 2% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, enrichment activities

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Full school year, 3 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool program in one school in Georgia in 2008-09. Outcomes for participants were compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Georgia Criterion- Referenced Competency Test - mathematics	§	§	Grade 7	82	-1.03 (0.24)*		
Georgia Criterion- Referenced Competency Test - mathematics	Tier II	Tier III	Grade 8	58	0.64 (0.27)*		
	Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - English language arts	Tier II	Tier III	Grade 7	58	0.85 (0.27)*
Georgia Criterion- Referenced Competency Test - English language arts	§	§	Grade 8	81	-1.19 (0.24)*
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

**CITATION:** Venzen, M. A. (2011). *Impact of the 21st Century afterschool program on student achievement in mathematics and language arts* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3487238)

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## 21st Century Community Learning Centers (Middle Grades)

#### **PROGRAM DESCRIPTION**

This is a national study of the impact of 21st Century Community Learning Centers in 2000-01. Programs served low-income middle school students in school districts around the country, including those in rural and urban areas, and aimed to provide academic support, recreation, and enrichment activities. Programs typically operated in school buildings but were sometimes run by community organizations. Programs offered a range of options, including homework help, academic activities, athletics, arts and cultural activities, life skills training, and unstructured recreational time. Programs were offered for the full school year, five days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- School Engagement

#### Negative Effect

The study found at least one negative outcome with no overriding contrary evidence for

Other Achievement

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement
- Science Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Physical Activity/Health, Promotion & Graduation, and Social & **Emotional Competencies** 

#### Location

LOCALE



Rural, Suburban, Urban



All regions

#### **Participants**

**CLASS GRADE** 

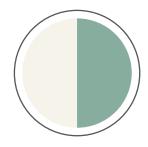
**TARGET STUDENTS** 

Grades 6-8

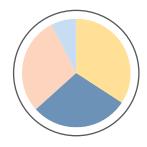
Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





At most schools, >50% of students eligible for free or reduced-price lunch



33% White 28% Latino 28% Black 7% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic tutoring, homework help, arts, sports/recreation, social development

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool programs offered to students in grades 6-8 at 62 sites in 34 school districts. Outcomes for students who participated in an afterschool program are compared to outcomes for students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2000-01.

#### **ATTENDANCE & ENROLLMENT**

Outcome	ESSA evidence tier  Without site and  With site and  Group	Number of students	Effect size (Standard error)			
	sample criteria	sample criteria				
Number of school days absent	Tier II	Tier II	Grades 6-8	4,189	0.11 (0.03) *	
Number of school days late	Tier II	Tier II	Grades 6-8	4,189	Cannot determine*	
	Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier	Number of		Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Mathematics course grade	œ	œ	Grades 6-8	4,189	0.06 (0.03)	
Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
English course grade	∞	œ	Grades 6-8	4,189	0.01 (0.03)	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **OTHER ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Social studies course grade	00	œ	Grades 6-8	4,189	0.03 (0.03)	
	Average effect size for Other Achievement outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **SCHOOL ENGAGEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	me Without site and With site and sample criteria sample criteria	students	(Standard error)			
Completes assignments to teacher's satisfaction (teacher report)	Tier II	Tier II	Grades 6-8	4,189	0.12 (0.03) *	
Student effort composite (teacher report)	Tier II	Tier II	Grades 6-8	4,189	0.10 (0.03) *	
Usually tries hard in reading or English (teacher report)	Tier II	Tier II	Grades 6-8	4,189	0.07 (0.03) *	
	Average effect size for School Engagement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **SCIENCE ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Science course grade	00	œ	Grades 6-8	4,189	0.01 (0.03)		
	Average effect size for <i>Science Achievement</i> outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

CITATIONS: Dynarski, M., Moore, M., Mullens, J., Gleason, P., James-Burdumy, S., Rosenberg, L., . . ., Deke, J. (2003). When schools stay open late: The national evaluation of the 21st Century Community Learning Centers program. First year findings (Report No. ED473230). Princeton, NJ: Mathematica Policy Research.

Dynarski, M., Moore, M., James-Burdumy, S., Rosenberg, L., Deke, J., & Mansfield, W. (2004). When schools stay open late: The national evaluation of the 21st Century Community Learning Centers program. New findings (MPR Report No. 8658-800/8720-700). Princeton, NJ: Mathematica Policy Research.

James-Burdumy, S., Dynarski, M., & Deke, J. (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.

James-Burdumy, S., Dynarski, M., & Deke, J. (2008). Afterschool program effects on behavior: Results from the 21st Century Community Learning Centers program national evaluation. *Economic Inquiry*, 46(1), 13-18.

## 21st Century Community Learning Centers (Philadelphia - Middle Grades)

#### **PROGRAM DESCRIPTION**

These 21st Century Community Learning Centers programs, offered in Philadelphia in 2012-13, provided academic support and other enrichment activities such as athletics, art and music, recreation, and career and technical education. The aim was to improve academic and behavioral outcomes of low-income youth attending high-poverty, low-performing schools. The programs were offered for the full school year, five days per week, for up to three hours per day.

## Location LOCALE REGION Urban Northeast

#### **EFFECTIVENESS AT A GLANCE**

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

Mathematics Achievement

#### **Mixed Effects**

This study found a mix of both improved and negative or null outcomes for

Reading/ELA Achievement

#### No Effect

The study found neither improved nor negative outcomes for

Attendance & Enrollment

Science Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

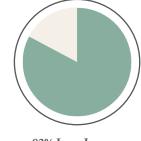
Grades 6-8

**TARGET STUDENTS** 

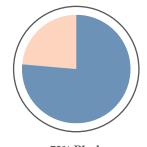
Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





83% Low-Income



72% Black 22% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Arts, tutoring, homework help, academic enrichment, sports/recreation, mentoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: Full school year, 5 days/week, 2.5-3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool programs in Philadelphia offered by six 21st Century Community Learning Center grantees. Outcomes for participants who attended at least 30 days of the program are compared to outcomes for students who did not participate or who participated for fewer than 30 days. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during 2012-13.

#### **ATTENDANCE & ENROLLMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
10 or more unexcused absences – 2011-12	§	§	Grades 6-8	Cannot determine	Cannot determine
10 or more unexcused absences – 2012-13	§	§	Grades 6-8	Cannot determine	Cannot determine
	Average effe	ct size for <i>Attendance</i> &	Enrollment outcor	nes at Tiers I-III	Cannot determine

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and With site and sample criteria sample criteria	students	(Standard error)			
Grade of C or higher in mathematics – 2011-12	§	§	Grades 6-8	Cannot determine	Cannot determine	
Mathematics course grade – 2012-13	Tier III	Tier III	Grades 6-8	1,124	Cannot determine*	
Pennsylvania State System of Assessment – mathematics – 2011-12	Tier III	Tier III	Grades 6-8	Cannot determine	Cannot determine*	
Pennsylvania State System of Assessment – mathematics- 2012-13	§	§	Grades 6-8	1,157	Cannot determine	
Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Grade of C or higher in reading – 2011-12	§	§	Grades 6-8	Cannot determine	Cannot determine		
Pennsylvania State System of Assessment – reading – 2011-12	§	§	Grades 6-8	Cannot determine	Cannot determine		
Pennsylvania State System of Assessment – reading – 2012-13	§	§	Grades 6-8	1,155	Cannot determine		
Reading course grade – 2012-13	Tier III	Tier III	Grades 6-8	1,124	Cannot determine*		
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

#### **SCIENCE ACHIEVEMENT**

Outcome	ESSA evidence tier		Group	Number of	Effect size		
0 4130	Without site and sample criteria	With site and sample criteria	ОТОСР	students	(Standard error)		
Pennsylvania State System of Assessment – science – 2012-13	§	§	Grades 6-8	281	Cannot determine		
Science course grade – 2012-13	§	§	Grades 6-8	1,124	Cannot determine		
	Average effect size for Science Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

CITATIONS: Gao, J., Hallar, B., & Hartmann, T. A. (2014). A snapshot of OST programs in Philadelphia: An evaluation of eleven 21st Century Community Learning Center grantees. Philadelphia, PA: Research for Action.

Hartmann, T. A., Gao, J., Kumar, A., & Edmunds, K. (2013). A snapshot of OST programming in Philadelphia: An evaluation of six 21st Century Community Learning Center grantees. Philadelphia, PA: Research for Action.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## After School Education and Safety (California – Middle Grades)

#### **PROGRAM DESCRIPTION**

The After School Education and Safety programs, offered in 2006-11 and funded by the State of California, were designed to provide academic support and a safe after school environment for students in kindergarten through ninth grade. Sites provided both academic and non-academic enrichment, with specific activities varying across sites. Almost all sites reported offering physical fitness/sports and arts/music. The programs were offered for the full school year, with the number of hours varying by program.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- Mathematics Achievement
- Physical Activity/Health

#### No Effect

The study found neither improved nor negative outcomes for

Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

#### **Participants**

Urban

**CLASS GRADE** 

TARGET STUDENTS

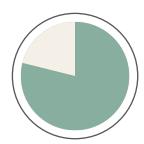
RACE OR ETHNICITY

West

Grades 6-8

Low-Income

#### SOCIO-ECONOMIC STATUS



79% Low-Income



67% Latino 13% White 11% Black

8% Asian 2% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Homework help, arts/ music, nutrition/health, physical fitness/sports, social skills, tutoring

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Certified teachers, program staff, volunteers

**DURATION:** Full school year, dosage varies by activity

**IMPLEMENTATION SUPPORT:** Provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on academic achievement and attendance of the After School Education and Safety Program for students in California. Outcomes for participants were compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted from 2006-11.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Percentage of days attended	Tier III	Tier III	Grades 6-8	216,196	0.11 (0.004)*		
	Average effect size for Attendance & Enrollment outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
California Standards Test - mathematics	Tier III	Tier III	Grades 6-8	313,270	0.01 (0.004)*	
Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Abdominal Strength	Tier III	Tier III	Grades 6-8	136,640	0.05 (0.005)*
Aerobic Capacity	Tier III	Tier III	Grades 6-8	136,640	0.09 (0.005)*
Body Composition	Tier III	Tier III	Grades 6-8	136,640	0.02 (0.005)*
Flexibility	Tier III	Tier III	Grades 6-8	136,640	0.02 (0.005)*
Trunk Strength	Tier III	Tier III	Grades 6-8	136,640	0.04 (0.005)*
Upper Body Strength	Tier III	Tier III	Grades 6-8	136,640	0.04 (0.005)*
	Average ef	fect size for <i>Physical Act</i>	<i>ivity/Health</i> outcon	nes at Tiers I-III	0.04

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Standards Test – English language arts	§	§	Grades 6-8	314,128	-0.002 (0.004)
	Average effect	size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	-0.002

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

CITATIONS: Huang, D., & Wang, J. (2012). *Independent statewide evaluation of ASES and 21st CCLC afterschool programs: May 1, 2008-December 31, 2011* (Report No. CDE4/CN077738/2011). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Center for the Study of Evaluation, Graduate School of Education and Information Studies, University of California, Los Angeles.

Huang, D., Silver, D., Cheung, M., Duong, M., Gualpa, A., Hodson, C., . . ., Vazquez, V. (2011). Independent statewide evaluation of after school programs (CRESST Report No. 789). Los Angeles, CA: National Center for Research on Evaluation, Standards and Student Testing, Graduate School of Education and Information Studies, University of California, Los Angeles.

## The After-School Corporation (Middle Grades)

The After-School Corporation programs, offered in New York City in 1998-2002, aimed to increase academic learning and healthy development and reduce anti-social behavior. Programs were school-based but supported by community organizations. Activities varied but included academic support, arts and culture, physical activities, health education, community service, and technology. Older youth also received college and career preparation, internships, peer counseling, and violence prevention. Programs were offered for the full school year, five days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for



#### **Mixed Effects**

The study found a mix of improved outcomes and null or negative outcomes for

Promotion & Graduation

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/ Health, Reading/ELA Achievement, Engagement with Schooling, Science Achievement, and Social & Emotional Competencies

## Location LOCALE REGION

#### **Participants**

Urban

**CLASS GRADE** 

**TARGET STUDENTS** 

Northeast

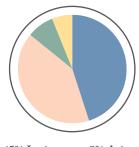
Grades 6-8

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



87% Low-Income



45% Latino 8% Asian 41% White 6% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic enrichment, arts, health education, sports/recreation, other enrichment

BEST PRACTICES USED: Sequenced, active learning, positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

This quasi-experiment estimates program impacts for students in grades 6-8 who participated in one of New York City's 28 After-School Corporation programs between 1988-99 and 2001-02. The analysis includes only students who participated for at least one year, attended the program for at least 60 days and at least 60 percent of those days, and remained in the New York City public school system through ninth grade. The comparison group includes students from the same schools who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored after-school activities.

#### **PROMOTION & GRADUATION**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Credits earned - 10th grade	§	§	Grades 6-8	1,375	0.07 (0.05)
Credits earned - 11th grade	§	§	Grades 6-8	526	-0.20 (0.09)
Credits earned - 9th grade	Tier III	Tier III	Grades 6-8	2,582	0.12 (0.04) *
On-time promotion from 9th to 10th grade	§	§	Grades 6-8	Cannot determine	0.05
Average effect size for <i>Promotion &amp; Graduation Outcomes</i> at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### ATTENDANCE & ENROLLMENT

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Continued enrollment two years after 9th grade	§	§	Grades 6-8	Cannot determine	0.08	
Percentage of school days attended 12th grade	§	§	Grades 6-8	417	0.04 (0.10)	
Percentage of school days attended 10th grade	Tier III	Tier III	Grades 6-8	2,459	0.18 (0.04) *	
Percentage of school days attended 9th grade	Tier III	Tier III	Grades 6-8	3,821	0.26 (0.03) *	
Percentage of school days attended 11th grade	§	§	Grades 6-8	1,108	0.08 (0.06)	
	Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### AfterZone

#### PROGRAM DESCRIPTION

AfterZone, offered from 2008-10, was a neighborhood-based network of afterschool programs in Providence, Rhode Island that aimed to provide a coordinated set of afterschool options for middle school students. Some activities took place on school campuses, and other activities took place in community settings. Students who signed up for community-activities received transportation to the activity. Participants chose from a variety of arts, skills, and sports programs and participated in academic enrichment. Programs were offered for the full school year, four days per week, 2.5 hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



#### **Mixed Effects**

This study found a mix of both improved and negative or null outcomes for

Physical Activity/Health

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement
- School Engagement
- Science Achievement

**NOT MEASURED FOR THIS INTERVENTION:** General Achievement, Other Achievement, Promotion & Graduation, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

Urban Northeast

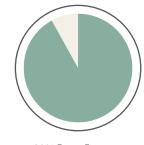
#### **Participants**

CLASS GRADE TARGET STUDENTS

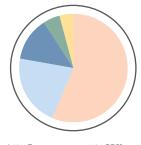
Grades 6-8

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



92% Low-Income



56% Latino 4% White 13% Black 21% Other 5% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENTS:** Academic enrichment, arts, sports, social development

**BEST PRACTICES USED:** Active learning, positive adult-student relationships

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 4 days/week, 2.5 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the AfterZone program in Providence, Rhode Island in 2008-09 and 2009-10. The comparison group is comprised of students who did not participate in the AfterZone program. About a third of these comparison students participated in other afterschool programs, many of which were academically-oriented.

#### **ATTENDANCE & ENROLLMENT**

Outcome	ESSA evid  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)	
Percent of school days absent	Tier II	Tier II	Grades 6-8	763	0.15 (0.07)*	
Percent of school days tardy	Tier II	Tier II	Grades 6-8	763	0.15 (0.07) *	
	Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Mathematics course grade	∞	∞	Grades 6-8	763	0.03 (0.07)
New England Common Assessments Program – mathematics	∞	$\infty$	Grades 6-8	763	-0.01 (0.07)
	Average effect	t size for Mathematics A	chievement outcor	mes at Tiers I-III	0.01

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Days/week student ate fruit	∞	∞	Grades 6-8	763	0.10 (0.07)
Days/week student ate sweet snacks	00	∞	Grades 6-8	763	-0.03 (0.07)
Hours of physical activity in last week	Tier II	Tier II	Grades 6-8	763	0.15 (0.07) *
Hours of sedentary activity in last week	∞	∞	Grades 6-8	763	-0.14 (0.07)
	Average ef	fect size for <i>Physical Act</i>	ivity/Health outcor	mes at Tiers I-III	0.02

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
English language arts course grade	00	00	Grades 6-8	763	0.04 (0.07)
New England Common Assessments Program – reading	∞	∞	Grades 6-8	763	-0.04 (0.07)
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	mes at Tiers I-III	0.00

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **SCHOOL ENGAGEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Doing well in school is important to student (self-report)	∞	œ	Grades 6-8	763	0.14 (0.07)
Hours on homework in last week	∞	$\infty$	Grades 6-8	763	0.06 (0.07)
	0.09				

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **SCIENCE ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Science course grade	∞	œ	Grades 6-8	763	0.08 (0.07)	
	Average effect size for Science Achievement outcomes at Tiers I-III					

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

## **Baltimore Community Schools (Middle Grades)**

#### PROGRAM DESCRIPTION

Baltimore Community Schools programs, offered in 2012-14, took place at community schools serving low-income students in grades K-12. The programs were intended to promote academic success, health, social and emotional development, high school graduation, and college and career readiness. Programs were provided by various types of organizations and offered academic support, recreation, and arts and sports activities. The programs were offered for the full school year, up to five days per week, for up to 4.5 hours per day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Attendance & Enrollment

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/ Health, Promotion & Graduation, Reading/ELA Achievement, Engagement with Schooling, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

## Location

LOCALE



Urban

REGION



#### **Participants**

**CLASS GRADE** 

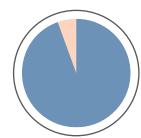
TARGET STUDENTS

Grades 6-8

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY

105



96% Low-Income

88% Black 5% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, homework help,

arts, recreation

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: Full school year, up to 5 days/week, 3-4.5 hours/day

**IMPLEMENTATION SUPPORT:** Ongoing support

This quasi-experiment estimates the impact of afterschool programs in community schools, administered by the Family League of Baltimore. Outcomes for students who attended afterschool programs for at least 200 hours were compared to outcomes for students who did not attend the programs and did not attend a community school. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2012-14.

#### ATTENDANCE & ENROLLMENT

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Chronic absenteeism (more than 20 days absent)	§	§	6th-8th grader (new attendees) – 2013-14	180	-0.10 (0.15)	
Chronic absenteeism	§	§	6th-8th graders (new attendees) – 2012-13	426	0.17 (0.10)	
Chronic absenteeism	Tier III	Tier III	6th-8th graders – 2011-12	624	0.50 (0.08)*	
Chronic absenteeism	§	§	6th-8th graders (2-yr attendees) – 2013-14	254	0.16 (0.13)	
Percentage of school days attended	Tier III	Tier III	6th-8th graders – 2011-12	624	Cannot determine*	
Percentage of school days attended	Tier III	Tier III	6th-8th graders (2-yr attendees) – 2013-14	254	Cannot determine*	
	Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Cooke Middle School Afterschool Recreation Program

#### PROGRAM DESCRIPTION

This afterschool recreation program, offered at Cooke Middle School in Philadelphia, Pennsylvania in 2000-01, aimed to improve academic and social outcomes for low-income middle school youth ages 10-14. The program was intentionally unstructured and offered use of the gymnasium or the fitness center, arts and crafts, and dance. In addition, students could access an open classroom to play board games, read, or do homework. The program was offered for six months, four days per week, two hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Physical Activity/Health
- School Engagement

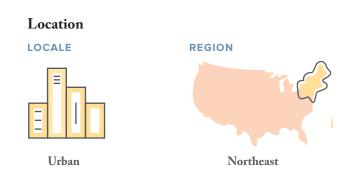
#### No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement

**NOT MEASURED FOR THIS INTERVENTION:** Other Achievement, Promotion & Graduation, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

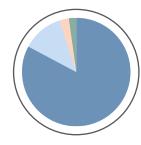
Grades 5-8

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



83% Black 2% White 3% Asian 12% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Arts, recreation

**BEST PRACTICES USED:** Positive adult-

student relationships

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION:** 6 months, 4 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment, originally designed as a randomized controlled trial, estimates the impact of an afterschool program at one middle school in Philadelphia. Outcomes for participants were compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2000-01.

#### **ATTENDANCE & ENROLLMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Percent of days attended	§	§	Grades 5-8	218	-0.06 (0.14)	
	Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **GENERAL ACHIEVEMENT**

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
GPA – 3rd marking period	8	§	Grades 5-8	207	-0.06 (0.14)
GPA – 4th marking period	§	§	Grades 5-8	216	0.04 (0.14)
	Average (	effect size for General A	chievement outcor	mes at Tiers I-III	-0.01

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Stanford Achievement Test 9 – mathematics	§	§	Grades 7-8	128	-0.07 (0.18)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	nes at Tiers I-III	-0.07

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### PHYSICAL ACTIVITY/HEALTH

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
1+ physical activity hours/week	§	§	Grades 5-8	220	0.10 (0.14)
1+ strength training hours/week	Tier III	Tier III	Grades 5-8	220	0.52 (0.14) *
Average effect size for Physical Activity/Health outcomes at Tiers I-III					0.31

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Stanford Achievement Test 9 - reading comprehension	§	§	Grades 7-8	129	0.10 (0.18)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					0.10

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SCHOOL ENGAGEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
1+ homework hours/ week	Tier III	Tier III	Grades 5-8	220	0.49 (0.14) *
Average effect size for School Engagement outcomes at Tiers I-III					0.49

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### **Texas After School Initiative**

#### PROGRAM DESCRIPTION

The Texas After School Initiative, offered from 1999-2003, aimed to promote academic achievement and decrease involvement in the juvenile justice system for at-risk 10-to 14-year-old students throughout the state of Texas. The programs were required to offer academic support linked to the state standards and include character and citizenship education as well as parent and/or mentor involvement. Programs were offered four days per week for two hours each day.

#### Location

LOCALE



Rural, Suburban, Urban



Southwest

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Attendance & Enrollment

OUTCOMES THAT DID NOT MEET TIER I-III STANDARDS FOR CAUSALITY: Mathematics Achievement and Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

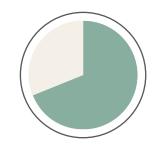
**CLASS GRADE** 

Grades 6-8

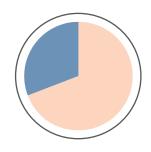
TARGET STUDENTS

Low-Achieving Students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



62% Low-Income



54% Latino 24% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: None reported

**BEST PRACTICES USED:** Active learning, positive adult-student relationships, family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Certified teachers, volunteers

**DURATION:** 4 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of a statewide afterschool initiative in Texas serving students in grades 6-8. Outcomes for students who participated in the program were compared to outcomes for a matched group of students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study examines the impact of the program from 1999-2000 through 2002-03.

#### **ATTENDANCE & ENROLLMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percentage of school days attended	Tier II	Tier II	Cohort 1 in year 1	14,334	0.10 (0.02)*
Percentage of school days attended	Tier II	Tier II	Cohort 1 in year 2	14,334	0.07 (0.02)*
Percentage of school days attended	Tier II	Tier II	Cohort 1 in year 3	14,334	0.05 (0.02)*
Percentage of school days attended	Tier II	Tier II	Cohort 3 in year 1	32,621	0.12 (0.01)*
Percentage of school days attended	Tier II	Tier II	Cohort 3 in year 2	32,621	0.09 (0.01)*
Percentage of school days attended	Tier II	Tier II	Cohort 4 in year 1	38,802	0.13 (0.01)*
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					-0.02

<sup>\*</sup>Statistically significant at p<.05

## 21st Century Community Learning Centers (St. Louis, Missouri)

Missouri's 21st Century Community Learning Centers, funded by the US Department of Education, aimed to improve math and reading achievement of low-income students. Programs in this study took place in St. Louis during 1998-99 and targeted elementary and middle school students. Programs offered a range of activities including tutoring, activities designed to address social and behavioral issues, and recreational activities. The duration of the programs is not reported.

#### **EFFECTIVENESS AT A GLANCE**

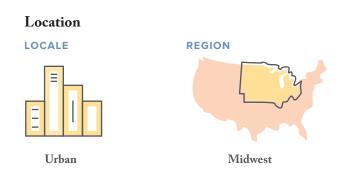
#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies



#### **Participants**

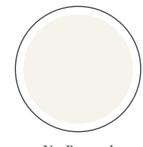
**CLASS GRADE** 

**TARGET STUDENTS** 

Elementary & Middle School

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





# Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, tutoring, social skills activities, recreation

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff **DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

The quasi-experiment estimates the impact of the 21st Century Community Learning Centers program in in seven St. Louis schools during 1998-99. Comparison group students attended the same schools but did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
District-developed math standardized assessment	Tier II	Tier III	Elementary/ middle	278	0.62 (0.15)*
Average effect size for Mathematics Achievement outcomes at Tiers I-III					0.62

<sup>\*</sup> Statistically significant at p<.05

## The After-School Corporation (PreK-Grade 8)

#### **PROGRAM DESCRIPTION EFFECTIVENESS AT A GLANCE** The After-School Corporation programs aimed **Positive Effect** to promote academic learning and healthy Overall, the studies found at least one improved development as well as reduce anti-social behavior outcome with no overriding contrary evidence for for children in New York City. Programs were Attendance & Enrollment school-based but supported by community organizations. Activities varied but included academic **Mixed Effects** support, arts and culture, physical activities, health Overall, the studies found a mix of improved and education, community service, and technology. null or negative outcomes for Older youth also received college and career Mathematics Achievement preparation, internships, peer counseling, and violence prevention. No Effect NOTE: A separate program summary of the After-Overall, the studies found neither improved nor school Corporation for the middle grades only is negative outcomes for also included in this evidence guide (see page 198). Reading/ELA Achievement

This review of The After-School Corporation (PreK-Grade 8) identified two studies of this program. The findings from each of these studies are presented individually on pages 215 – 220 of this evidence guide.

- Reisner, E. R., White, R. N., Russell, C. A., & Birmingham, J. (2004). *Building quality, scale, and effectiveness in afterschool programs: Summary report of the TASC evaluation.* Washington, DC: Policy Studies Associates, Inc. (Note: *Two studies are included in this manuscript*).
- White, R. N., Reisner, E. R., Welsh, M., & Russell, C. A. (2001). *Patterns of student-level change linked to TASC participation, based on TASC projects in year 2.* Washington, DC: Policy Studies Associates, Inc.

## The After-School Corporation (PreK-Grade 8 – 1998-2004)

#### **PROGRAM DESCRIPTION**

The After-School Corporation programs, offered in 1998-2004, aimed to promote academic learning and healthy development and reduce anti-social behavior for children in New York City. Programs were school-based but supported by community organizations. Activities varied but included academic support, arts and culture, physical activities, health education, community service, and technology. The programs were offered for the full school year, five days per week, three hours each day.

#### LOCALE

Location



Northeast

#### REGION



#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Attendance & Enrollment

# NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### Urban

Participants
CLASS GRADE

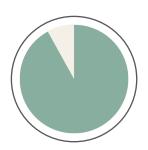
STUDY LOCATION AND PARTICIPANTS

TARGET STUDENTS

Low-Income

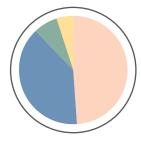
#### **SOCIO-ECONOMIC STATUS**

**Grades PreK-8** 



92% Low-Income

### RACE OR ETHNICITY



49% Latino 39% Black

7% Asian 5% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic enrichment, arts, health education, sports/recreation, other enrichment

**BEST PRACTICES USED:** Sequenced, active learning, positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of The After-School Corporation (TASC) programs for students in grades PreK-8 in New York City. The comparison group is comprised of students at schools in the study implementing a TASC program who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community- sponsored afterschool activities. The study was conducted in 1998-2004.

#### ATTENDANCE & ENROLLMENT

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percent of school days attended	Tier III	Tier III	Grades PreK-8	77,768	0.05 (0.01) *
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

## The After-School Corporation (PreK-Grade 8 – 1998-2004)

#### **PROGRAM DESCRIPTION**

The After-School Corporation programs, offered in 1998-2004, aimed to promote academic learning and healthy development and reduce anti-social behavior for children in New York City. Programs were school-based but supported by community organizations. Activities varied but included academic support, arts and culture, physical activities, health education, community service, and technology. The programs were offered for the full school year, five days per week, three hours each day.

#### Dautioin

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

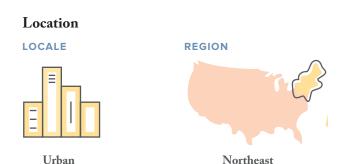
The study found at least one improved outcome with no overriding contrary evidence for

Mat

**Mathematics Achievement** 

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



#### **Participants**

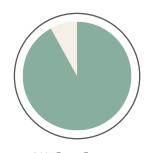
**CLASS GRADE** 

TARGET STUDENTS

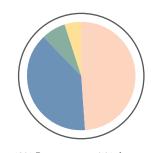
**Grades PreK-8** 

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



92% Low-Income



49% Latino 39% Black

7% Asian 5% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic enrichment, arts, health education, sports/recreation, other enrichment

**BEST PRACTICES USED:** Sequenced, active learning, positive adult-student relationships, family engagement, respect for student cultures

## Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of The After-School Corporation (TASC) programs for students in grades 3-8 in New York City. The comparison group is comprised of schools in the study implementing a TASC program but who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored after-school activities. The study was conducted in 1998-04.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percent of school days attended	Tier III	Tier III	Grades 3-8		0.08 *
	Average effect	t size for Mathematics Ad	chievement outco	mes at Tiers I-III	0.08

<sup>\*</sup> Statistically significant at p<.05

## The After-School Corporation (Grades 3-8 – 1999-2000)

#### **PROGRAM DESCRIPTION**

The After-School Corporation programs, offered in 1999-2000, aimed to promote academic learning and healthy development and reduce anti-social behavior for children in New York City. Programs were school-based but supported by community organizations. Activities varied but included academic support, arts and culture, physical activities, health education, community service, and technology. The programs were offered for the full school year, five days per week, three hours each day.

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION Urban Northeast

#### EFFECTIVENESS AT A GLANCE

#### **Negative Effect**

The study found at least one negative outcome with no overriding contrary evidence for



#### No Effect

The study found neither improved nor negative outcomes for



NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

CLASS GRADE

Grades 3-8

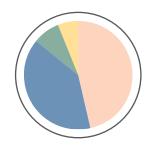
TARGET STUDENTS

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



93% Low-Income



46% Latino 39% Black

8% Asian 6% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic enrichment, arts, health education, sports/recreation, other enrichment

**BEST PRACTICES USED:** Sequenced, active learning, positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the After-School Corporation (TASC) programs for students in grades 3-8 in New York City. The comparison group is comprised of schools in the study implementing a TASC program but who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 1999-2000.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New York State mathematics assessments (grades 4, 8) and aligned tests for other grades	∞	∞	Multiple levels	23,009	-0.05 (0.01) *
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	nes at Tiers I-III	-0.05

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New York State English language arts assessments (grades 4, 8) and aligned tests for other grades	∞	∞	Multiple levels	22,128	0.00 (0.01)
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	mes at Tiers I-III	0.00

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

## **Cool Girls**

#### PROGRAM DESCRIPTION

Cool Girls, offered at eight schools in the Southeast during 2005-06, was a school-based afterschool program designed to increase the psychological and social resources of low-income girls in grades 4-8. The program had three key components: Girls Club, which focused on life skills; Cool Scholars, which focused on academic skill-building; and Cool Sisters, a one-to-one mentoring program. In addition, the program included weekend workshops, special events, field trips, and a summer program. The program was offered for the full school year, one day per week.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



#### No Effect

The study found neither improved nor negative outcomes for



NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

#### **Participants**

Urban

CLASS GRADE TAR

Grades 4-8

**TARGET STUDENTS** 

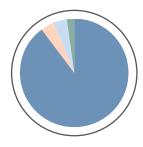
Southeast

Low-Income Girls

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



80% Low-Income



89% Black 2% Asian 4% Latino 4% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENTS:** Tutoring, homework help, drug/alcohol prevention, mentoring

**BEST PRACTICES USED:** Positive adult-student relationships, family engagement, respect for student cultures

## Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff

**DURATION:** Full school year, 1 day/week

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment compared outcomes for students who participated in Cool Girls to outcomes for a matched group of students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted at eight schools during the 2005-06 school year.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Number of fruits and vegetables eaten in past day (self-report)	00	œ	Grades 4-8	175	0.19 (0.15)	
Number of physical activities in the past week (self-report)	Tier II	Tier III	Grades 4-8	175	0.53 (0.15)*	
	Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### SCHOOL ENGAGEMENT

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Internal motivation (adapted from existing measures (Harter, 1982; Ryan & Connell, 1989))	∞	∞	Grades 4-8	175	0.15 (0.15)
Number of days per week of studying after school (self-report)	∞	∞	Grades 4-8	175	0.17 (0.15)
Average effect size for School Engagement outcomes at Tiers I-III					

 $<sup>\</sup>infty$  Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

## 21st Century Community Learning Centers (Philadelphia - High School)

#### **PROGRAM DESCRIPTION**

These 21st Century Community Learning Centers programs, offered in Philadelphia in 2012-13, provided academic support and other enrichment activities such as athletics, art and music, recreation, and career and technical education. The aim was to improve academic and behavioral outcomes of low-income youth attending high-poverty, low-performing schools. The programs were offered for the full school year, five days per week, for up to three hours per day.

## **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



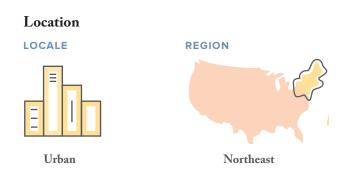
#### No Effect

The study found neither improved nor negative outcomes for



Attendance & Enrollment

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/ Health, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies



#### **Participants**

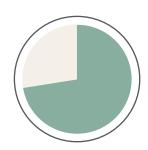
**CLASS GRADE** 

**TARGET STUDENTS** 

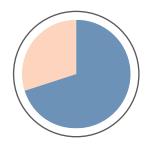
Grades 9-12

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



73% Low-Income



66% Black 28% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Arts, sports, tutoring, homework

help, creative activities

**BEST PRACTICES USED:** Not reported

## Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: Full school year, 5 days/week, 2.5-3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool programs in Philadelphia offered by six 21st Century Community Learning Center grantees. Outcomes for participants who attended at least 30 days of the program are compared to outcomes for students who did not participate or who participated for fewer than 30 days. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during 2012-13.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
10 or more unexcused absences	§	§	High school	Cannot determine	Cannot determine
	Average effe	ct size for <i>Attendance</i> &	Enrollment outcor	mes at Tiers I-III	Cannot determine

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **PROMOTION & GRADUATION**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Earned English credit	Tier III	Tier III	High school	Cannot determine	Cannot determine*
Earned mathematics credit	Tier III	Tier III	High school	Cannot determine	Cannot determine*
Earned science credit	§	§	High school	Cannot determine	Cannot determine
	Average eff	ect size for <i>Promotion</i> &	<i>Graduation</i> outcor	nes at Tiers I-III	Cannot determine

<sup>\*</sup> Statistically significant at p<.05

CITATIONS: Gao, J., Hallar, B., & Hartmann, T. A. (2014). A snapshot of OST programs in Philadelphia: An evaluation of eleven 21st Century Community Learning Center grantees. Philadelphia, PA: Research for Action.

Hartmann, T. A., Gao, J., Kumar, A., & Edmunds, K. (2013). A snapshot of OST programming in Philadelphia: An evaluation of six 21st Century Community Learning Center grantees. Philadelphia, PA: Research for Action.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## After School Safety and Enrichment For Teens

The After School Safety and Enrichment for Teens (ASSETs) program, offered from 2007-10 and funded by the State of California, served students in over 300 schools in the state. Sites offered academic and non-academic enrichment. The most commonly offered activities were academic enrichment, arts/music, homework assistance, physical fitness/sports, recreation, and tutoring. Programs were offered for the full school year, five days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### Positive Effect

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- Mathematics Achievement
- Reading/ELA Achievement
- Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

## Location

LOCALE



Suburban, Rural, Urban

## REGION



West

## **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

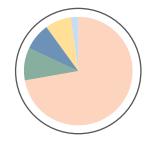
Grades 9-11

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



78% Low-Income



73% Latino 10% Asian 8% Black

8% White 2% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic enrichment, arts, health education, sports/recreation, other enrichment

**BEST PRACTICES USED:** Positive adult-student relationships, family engagement

## Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group formats

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of After School Safety and Enrichment for Teens on students who attended the program for at least one day during a given school year. The comparison group is comprised of students who never participated in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2007-10.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percentage of days attended	Tier III	Tier III	Grades 9-11	65,616	0.14 (0.01)*
	Average effe	ct size for <i>Attendance</i> &	Enrollment outcor	mes at Tiers I-III	0.14

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California High School Exit Examination (CAHSEE) mathematics	Tier III	Tier III	Grades 9-11	76,294	0.08 (0.01)*
California Standards Tests (CST) mathematics	Tier III	Tier III	Grades 9-11	212,412	0.02 (0.004)*
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Aerobic Capacity	Tier III	Tier III	Grades 9-11	70,278	0.17 (0.01)*
Body Composition	Tier III	Tier III	Grades 9-11	70,278	0.16 (0.01)*
Abdominal Strength	Tier III	Tier III	Grades 9-11	70,278	0.09 (0.01)*
Trunk Strength	Tier III	Tier III	Grades 9-11	70,278	0.14 (0.01)*
Upper Body Strength	Tier III	Tier III	Grades 9-11	70,278	0.16 (0.01)*
Flexibility	Tier III	Tier III	Grades 9-11	70,278	0.15 (0.01)*
	Average eff	ect size for <i>Physical Act</i>	<i>ivity/Health</i> outcon	nes at Tiers I-III	0.15

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California High School Exit Examination (CAHSEE) English language arts	Tier III	Tier III	Grades 9-11	76,380	0.06 (0.01)*
California Standards Tests (CST) English language arts	Tier III	Tier III	Grades 9-11	224,839	0.03 (0.004)*
	Average effect	t size for Reading/ELA Ad	chievement outcor	nes at Tiers I-III	0.05

<sup>\*</sup> Statistically significant at p<.05

CITATION: Huang, D., & Wang, J. (2012). Independent statewide evaluation of high school after school programs: May 1, 2008-December 31, 2011 (CRESST Report). Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing, Center for the Study of Evaluation, Graduate School of Education & Information Studies, University of California, Los Angeles.

## The Afterschool Corporation (High School)

#### PROGRAM DESCRIPTION

The Afterschool Corporation (TASC) programs, offered in New York City from 1998-2004, aimed to promote academic learning and healthy development as well as reduce anti-social behavior for in New York City. Programs were school-based but supported by community organizations. Activities varied but included academic support, arts and culture, physical activities, health education, community service, and technology. Youth also received college and career preparation, internships, peer counseling, and violence prevention.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

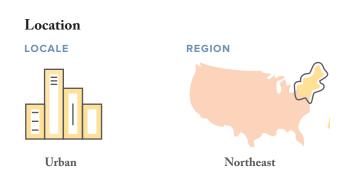
The study found at least one improved outcome with no overriding contrary evidence for



Attendance & Enrollment

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



## **Participants**

CLASS GRADE TARGET STUDENTS

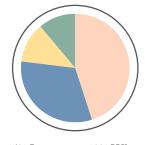
Grades 9-12

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



76% Low-Income



45% Latino 12% White 32% Black 11% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic enrichment, arts, health education, sports/recreation, other enrichment

**BEST PRACTICES USED:** Sequenced, active learning, positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the Afterschool Corporation (TASC) programs for students in grades 9-12 in New York City. The comparison group is comprised of students at schools in the study implementing a TASC program who did not participate in the program. The comparison students experienced "business as usual," which could have included other school and community-sponsored afterschool activities. The study was conducted in 1998-2004.

#### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percent of school days attended	Tier III	Tier III	Grades 9-12	6,605	0.38 (0.03) *
	Average effe	ect size for <i>Attendance</i> &	Enrollment outcor	mes at Tiers I-III	0.38

<sup>\*</sup> Statistically significant at p<.05

**CITATION:** Reisner, E. R., White, R. N., Russell, C. A., & Birmingham, J. (2004). *Building quality, scale, and effectiveness in afterschool programs:* Summary report of the TASC evaluation. Washington, DC: Policy Studies Associates, Inc.

**NOTE:** A second study (Birmingham & White, 2005) examined the impacts of TASC for a partially overlapping sample of high school students. The study also had one outcome at Tier III (attendance), with the same reported effect size and standard error for the attendance outcome as in the Reisner, White, Russell, & Birmingham (2004) study. We count these as two separate studies but, for parsimony, report only the finding from the 2004 study in this program summary. The program's ESSA rating is the same regardless of whether we combine results from both studies or present one study only.

# 21st Century Community Learning Centers (Elementary)

This is a national study of the impact of 21st Century Community Learning Centers in 2000-02. Programs served low-income students in school districts around the country, including those in rural and urban areas, and aimed to provide academic support, recreation, and enrichment activities. Programs typically operated in school buildings but were sometimes run by community organizations. Programs offered a range of programming, including homework help, academic activities, athletics, arts and cultural activities, life skills training, and unstructured recreational time. Programs were offered for the full school year, five days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- Mathematics Achievement
- Reading/ELA Achievement
- Science Achievement

#### **Negative Effects**

The study found at least one negative outcome with no overriding contrary evidence for

- Science Achievement
- School Engagement
- Other Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Physical Activity/Health, and Promotion & Graduation

#### Location

LOCALE



Suburban, Rural, Urban



All regions

## **Participants**

**CLASS GRADE** 

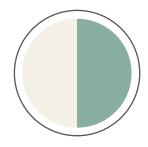
**TARGET STUDENTS** 

Grades K-6

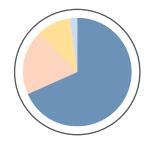
Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Most schools had more than 50% low-income students



67% Black 10% White 19% Latino 2% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Academic tutoring, homework help, arts, sports/recreation, social development

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of afterschool programs offered to students in grades K-6 at 26 sites in 12 school districts. Outcomes for students who were offered the opportunity to participate in an afterschool program are compared to outcomes for students who did not receive this offer. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2000-01 and 2001-02.

#### **ATTENDANCE & ENROLLMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Number of school days absent	<b>◊</b>	<b>◊</b>	Grades K-6	1,551	-0.03 (0.05)
Number of school days late	<b>◊</b>	<b>◊</b>	Grades K-6	1,551	Cannot determine
	Average effe	ect size for Attendance &	Enrollment outcor	mes at Tiers I-III	-0.03

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Mathematics course grade	<b>◊</b>	$\Diamond$	Grades K-6	1,551	-0.06 (0.05)	
	Average effect size for Mathematics Achievement outcomes at Tiers I-III					

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)		
English language arts course grade	<b>◊</b>	<b>◊</b>	Grades K-6	1,551	0.03 (0.05)		
Stanford Achievement Test 9 – reading comprehension	<b>◊</b>	<b>◊</b>	Grades K-6	1,748	0.01 (0.05)		
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **OTHER ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Social studies/history course grade	<b>◊</b>	<b>◊</b>	Grades K-6	1,551	-0.11 (0.05) *
	Averag	e effect size for <i>Other A</i>	chievement outcor	mes at Tiers I-III	-0.11

<sup>\*</sup> Statistically significant at p<.05

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **SCHOOL ENGAGEMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Achieves at above- average or very high level (teacher report)	<b>◊</b>	<b>◊</b>	Grades K-6	1,778	-0.19 (0.05) *
Comes to school prepared and ready to learn (teacher report)	<b>◊</b>	<b>◊</b>	Grades K-6	1,778	-0.10 (0.05) *
Completes assignments to teacher's satisfaction (teacher report)	<b>◊</b>	<b>◊</b>	Grades K-6	1,778	-0.04 (0.05)
Student effort composite (teacher report)	<b>◊</b>	<b>◊</b>	Grades K-6	1,778	Cannot determine
Usually tries hard in reading (teacher report)	<b>◊</b>	<b>◊</b>	Grades K-6	1,778	-0.14 (0.05) *
	Average	e effect size for <i>School E</i>	ngagement outcor	mes at Tiers I-III	-0.10

<sup>\*</sup> Statistically significant at p<.05

#### **SCIENCE ACHIEVEMENT**

	ESSA evid	evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Science course grade	<b>◊</b>	$\Diamond$	Grades K-6	1,551	-0.02 (0.05)
Average effect size for Science Achievement outcomes at Tiers I-III					

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **SOCIAL & EMOTIONAL COMPETENCIES**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percent of students whose teachers report that the student gets along well with others	$\Diamond$	<b>◊</b>	Grades K-6	1,778	-0.19 (0.05) *
	Average effect size fo	or Social & Emotional Col	mpetencies outco	mes at Tiers I-III	-0.19

<sup>\*</sup> Statistically significant at p<.05

**CITATIONS:** Dynarski, M., Moore, M., Mullens, J., Gleason, P., James-Burdumy, S., Rosenberg, L., . . ., Deke, J. (2003). *When schools stay open late: The national evaluation of the 21st Century Community Learning Centers program. First year findings* (Report No. ED473230). Princeton, NJ: Mathematica Policy Research.

Dynarski, M., Moore, M., James-Burdumy, S., Rosenberg, L., Deke, J., & Mansfield, W. (2004). When schools stay open late: The national evaluation of the 21st Century Community Learning Centers program. New findings (MPR Report No. 8658-800/8720-700). Princeton, NJ: Mathematica Policy Research.

James-Burdumy, S., Dynarski, M., & Deke, J. (2007). When elementary schools stay open late: Results from the national evaluation of the 21st Centruy Community Learning Centers program. *Educational Evaluation and Policy Analysis*, 29(4), 296-318.

James-Burdumy, S., Dynarski, M., & Deke, J. (2008). Afterschool program effects on behavior: Results from the 21st Century Community Learning Centers program national evaluation. *Economic Inquiry*, 46(1), 13-18.

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

## 21st Century Community Learning Centers (Louisiana)

These 21st Century Community Learning Centers programs, funded by the U.S. Department of Education, were offered in four Louisiana school districts, two urban and two rural (Baton Rouge, New Orleans, Grant Parish, and Bienville Parish) during 2003-04. The study reported no details about the program components or duration.

#### Location

LOCALE



Rural, Urban



Southeast

**TARGET STUDENTS** 

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for



General Achievement

**NOT MEASURED FOR THIS INTERVENTION: Mathematics** Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

## **Participants**

**CLASS GRADE** 

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY

Grades 3-5



80% Low-Income

59% Black 40% White 1% Asian

#### **Program Content**

MAIN COMPONENT: None reported

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff **DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

The study uses a quasi-experimental design to estimate the impact of the program on students in four school districts, two urban and two rural, in Louisiana (Baton Rouge, New Orleans, Grant Parish, and Bienville Parish). Outcomes for participants are compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2003-04.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
lowa Test of Basic Skills - core	§	§	Grades 3-5	1192	0.10 (0.07)	
Average effect size for General Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## 21st Century Community Learning Centers (New Hampshire)

#### PROGRAM DESCRIPTION

These 21st Century Community Learning Centers programs, funded by the US Department of Education, were offered in five elementary schools in New Hampshire in 2008-13. 21st Century Community Learning Centers aimed to improve the math and reading achievement of low-income students. The afterschool program activities included tutoring, homework support, drug and violence prevention, technology education, art/music, recreation, character education, and counseling. The program was offered for the full school year, five days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

#### **Participants**

Urban

**CLASS GRADE** 

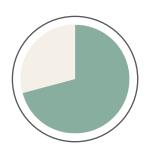
TARGET STUDENTS

Northeast

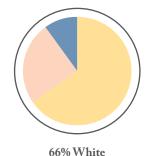
Grades 1-5

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



71% Low-Income



25% Latino 10% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Tutoring, homework help, drug and violence prevention, technology education, art/music, recreation, character education, counseling

BEST PRACTICES USED: Positive adult-student

relationships, family engagement

## Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Full school year, 5 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment compared outcomes for students who participated in afterschool programs funded through the 21st Century Community Learning Centers program during 2008-13. Study participants were from five low-income elementary schools in New Hampshire. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
New England Common Assessments Program - mathematics	œ	∞	Grades 1-5	1,955	0.00 (0.05)	
Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
New England Common Assessments Program - reading	∞	œ	Grades 1-5	1,955	0.00 (0.05)
	Average effect	t size for <i>Reading/ELA Ad</i>	chievement outcor	nes at Tiers I-III	0.00

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# 21st Century Community Learning Centers (West Virginia – Elementary)

## **PROGRAM DESCRIPTION EFFECTIVENESS AT A GLANCE** West Virginia's 21st Century Community Learning No Effect Centers, offered from 2012-2015, aimed to improve Overall, the studies found neither improved nor math and reading achievement of low-income negative outcomes for students. Programs served K-12 students through-Mathematics Achievement out the state and were operated by 33 separate Reading/ELA Achievement programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. A summer camp was also offered.

This review of 21st Century Community Learning Centers (West Virginia – Elementary) identified three studies of this program (two manuscripts describe the same study). The findings from each of these studies are presented individually on pages 240 – 245 of this evidence guide.

- White, L. J. (2014). 21st Century Community Learning Centers: A descriptive evaluation for 2012-13. Charleston, WV:
   West Virginia Department of Education, Division of Teaching and Learning, Office of Research.
- White, L., & Hixson N. (2014). 21st Century Community Learning Centers 2013: A quasi-experimental investigation
  of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West
  Virginia Department of Education, Division of Teaching and Learning, Office of Research.
- White, L. J., Hammer, P. C., & Whisman, A. (2015). 21st Century Community Learning Centers, 2014-2015: A
  descriptive evaluation. Charleston, WV: West Virginia Department of Education, Division of Teaching and
  Learning, Office of Assessment.
- White, L. J., & Whisman, A. (2015). 21st Century Community Learning Centers 2014: A quasi-experimental investigation of program impacts on student achievement in mathematics and reading/language arts.
   Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

## 21st Century Community Learning Centers (West Virginia - Elementary - 2012-13)

#### **PROGRAM DESCRIPTION**

West Virginia's 21st Century Community Learning Centers, offered in 2012-13, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

## Location

LOCALE



Suburban, Rural, Urban



Southeast

## **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 4-5

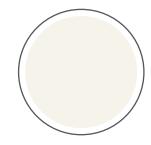
Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY









Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Multiple programs

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, attendance range=2-93 days

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 4-5 of participating in 21st Century Community Learning Center programs during 2012-13. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 4	1,014	0.02 (0.06)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 5	930	0.02 (0.07)
	Average effect	t size for Mathematics Ad	chievement outcor	mes at Tiers I-III	0.02

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 4	1,014	0.12 (0.06)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 5	930	0.02 (0.07)
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	0.07

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

CITATIONS: White, L., & Hixson N. (2014). 21st Century Community Learning Centers 2013: A quasi-experimental investigation of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

White, L. J. (2014). 21st Century Community Learning Centers: A descriptive evaluation for 2012-13. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

## 21st Century Community Learning Centers (West Virginia - Elementary - 2013-14)

#### **PROGRAM DESCRIPTION**

West Virginia's 21st Century Community Learning Centers, offered in 2013-14, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

## Location

LOCALE



Suburban, Rural, Urban



Southeast

## **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

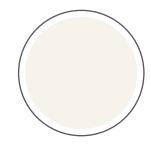
Grades 4-5

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Multiple programs

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 4-5 of participating in 21st Century Community Learning Center programs during 2013-14. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 4	904	0.03 (0.07)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 5	846	0.05 (0.07)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 4	904	0.08 (0.07)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 5	930	0.08 (0.07)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** White, L. J., & Whisman, A. (2015). 21st Century Community Learning Centers 2014: A quasi-experimental investigation of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

## 21st Century Community Learning Centers (West Virginia - Elementary - 2014-15)

#### **PROGRAM DESCRIPTION**

West Virginia's 21st Century Community Learning Centers, offered in 2014-15, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies



Suburban, Rural, Urban

Southeast

## **Participants**

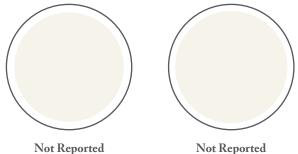
**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 4-5

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT:** Multiple programs

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 4-5 of participating in 21st Century Community Learning Center programs during 2014-15. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 4	578	0.03 (0.07)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 5	312	0.05 (0.07)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 4	578	0.08 (0.07)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 5	312	0.08 (0.07)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** White, L. J., Hammer, P. C., & Whisman, A. (2015). 21st Century Community Learning Centers, 2014-2015: A descriptive evaluation. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Assessment.

# After School Education and Safety (San Francisco – Elementary)

#### **PROGRAM DESCRIPTION**

The After School Education and Safety (ASE) initiative of the San Francisco Unified School District, offered in 31 schools in 2005-06, aimed to improve student achievement and decrease involvement in unhealthy behaviors through providing safe spaces, expanded learning opportunities, and social service supports. ASE offered multicomponent programming that included three types of activities: education, enrichment/recreation, and life skills or drug and alcohol prevention. The programs were offered for the full school year.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION Urban West

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

**Grades K-5** 

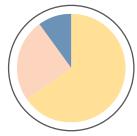
Low-Income

#### SOCIO-ECONOMIC STATUS





79% Low-Income



67% Latino 13% White 11% Black

8% Asian 2% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Arts, sports, tutoring, drug/alcohol prevention, clubs, social skills activities

**BEST PRACTICES USED:** Family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, volunteers, program staff

**DURATION:** Full school year, no other info provided

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact on academic achievement and attendance of the After School Education and Safety Program for students in the elementary grades in San Francisco Unified School District. Outcomes for participants were compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 31 schools during 2005-06.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Proficient level on California Standards Test - mathematics	œ	∞	Elementary grades	7,665	0.01 (0.02)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Proficient level on California Standards Test - English language arts	00	00	Elementary grades	7,654	0.01 (0.02)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

## **Boston Elementary School Afterschool Program**

The Boston Elementary School Afterschool Program, offered at one elementary school in 2005-06, was designed to complement and extend school day learning. The school-based program was staffed primarily by school day teachers and offered a range of academic and enrichment activities including architecture, chess, computers, crochet, dance, French, math club, music, and swimming. The program was offered for the full school year, five days per week, 3.75 hours each day.

# **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# Location LOCALE REGION Urban Northeast

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

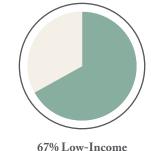
RACE OR ETHNICITY

**Grades K-8** 

**General Population** 

#### **SOCIO-ECONOMIC STATUS**





37% White 36% Black

20% Asian 6% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

culture, sports/recreation

MAIN COMPONENTS: Academic enrichment, arts and

**BEST PRACTICES USED:** Active learning,

family engagement

## Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION:** Full school year, 5 days/week, 3.75 hours/day

**IMPLEMENTATION SUPPORT:** Ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool program for students in grades 3-5 at one elementary school in Boston, Massachusetts. Outcomes for participants were compared to outcomes for non-participants attending the same school and in the same grades. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2005-06.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Massachusetts Comprehensive Assessment System – mathematics – 1-year participants	§	§	Grades K-8	162	0.08 (0.17)
Massachusetts Comprehensive Assessment System – mathematics – 2-year participants	§	§	Grades K-8	132	0.15 (0.23)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Massachusetts Comprehensive Assessment System - English language arts – 1-year participants	§	§	Grades K-8	162	0.02 (0.17)
Massachusetts Comprehensive Assessment System - English language arts – 2-year participants	§	§	Grades K-8	132	0.15 (0.23)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** Moldow, E. (2007). *Afterschool program activities and academic achievement: A study in one urban k–8 school* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3278159)

## Hope Center for Kids

#### PROGRAM DESCRIPTION

The Hope Center for Kids, offered in Omaha, Nebraska during aimed to support the development of Christian faith as well as the academic success, high school graduation, post-secondary training, and employability of elementary school children who attended local public schools. The faith-based program offered homework help and dedicated homework time, study skills classes, mentoring, and faith-based activities (e.g., prayer and Bible study). The program was offered for the full school year, five days per week, 3.5 hours each day. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

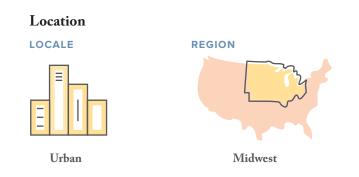
#### No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 2-5

Low-Income

#### SOCIO-ECONOMIC STATUS









100% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Homework help, mentoring,

multiple programs

student cultures

**BEST PRACTICES USED:** Positive adult-student relationships, family engagement, respect for

Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Full school year, 5 days/week, 3.5 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment compared outcomes for students who attended an afterschool program at the Hope Center for Kids in Omaha, Nebraska to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

#### ATTENDANCE & ENROLLMENT

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Days absent from school	∞	$\infty$	Grades 2-5	30	-0.34 (0.38)
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Achievement Test - mathematics	∞	∞	Grades 2-5	30	-0.31 (0.38)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

 $<sup>\</sup>infty$  Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
California Achievement Test - language	∞	œ	Grades 2-5	30	-0.54 (0.39)
California Achievement Test - reading	∞	∞	Grades 2-5	30	-0.55 (0.39)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					-0.54

 $<sup>\</sup>infty$  Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# 21st Century Community Learning Centers (West Virginia – Middle Grades)

### **PROGRAM DESCRIPTION EFFECTIVENESS AT A GLANCE** West Virginia's 21st Century Community Learning No Effect Centers aimed to improve math and reading Overall, the studies found neither improved nor achievement of low-income students. Programs negative outcomes for served K-12 students throughout the state and were Mathematics Achievement operated by 33 separate programs. Afterschool Reading/ELA Achievement programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. A summer camp was also offered.

This review of 21st Century Community Learning Centers (West Virginia – Middle Grades) identified three studies of this program (two manuscripts report the same study). The findings from each of these studies are presented individually on pages 254 – 262 of this evidence guide.

- White, L., & Hixson N. (2014). 21st Century Community Learning Centers 2013: A quasi-experimental investigation
  of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West
  Virginia Department of Education, Division of Teaching and Learning, Office of Research.
- White, L. J. (2014). 21st Century Community Learning Centers: A descriptive evaluation for 2012-13. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.
- White, L. J., Hammer, P. C., & Whisman, A. (2015). 21st Century Community Learning Centers, 2014-2015: A
  descriptive evaluation. Charleston, WV: West Virginia Department of Education, Division of Teaching and
  Learning, Office of Assessment.
- White, L. J., & Whisman, A. (2015). 21st Century Community Learning Centers 2014: A quasi-experimental
  investigation of program impacts on student achievement in mathematics and reading/language arts. Charleston,
  WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

# 21st Century Community Learning Centers (West Virginia - Middle Grades - 2012-13)

### **PROGRAM DESCRIPTION**

West Virginia's 21st Century Community Learning Centers, offered in 2012-13, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- **Mathematics Achievement**
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# Location

LOCALE



Suburban, Rural, Urban



Southeast

### **Participants**

**CLASS GRADE** 

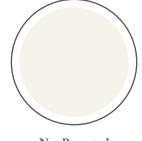
**TARGET STUDENTS** 

Grades 6-8

Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Not Reported



Not Reported

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

**MAIN COMPONENTS:** Multiple programs

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, attendance range=2-93 days

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 6-8 of participating in 21st Century Community Learning Center programs during 2012-13. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evid	ESSA evidence tier		Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 6	700	0.01 (0.08)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 7	390	0.04 (0.10)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 8	352	-0.05 (0.11)
	Average effec	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.00

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 6	700	0.01 (0.08)	
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 7	390	0.07 (0.10)	
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 8	352	0.04 (0.11)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

CITATIONS: White, L., & Hixson N. (2014). 21st Century Community Learning Centers 2013: A quasi-experimental investigation of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

White, L. J. (2014). 21st Century Community Learning Centers: A descriptive evaluation for 2012-13. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

# 21st Century Community Learning Centers (West Virginia - Middle Grades - 2013-14)

West Virginia's 21st Century Community Learning Centers, offered in 2013-14, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- **Mathematics Achievement**
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies



Suburban, Rural, Urban

### **Participants**

**CLASS GRADE** 

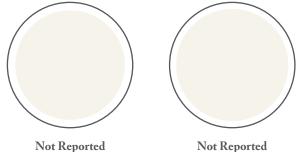
**TARGET STUDENTS** 

Southeast

Grades 6-8

Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

**MAIN COMPONENTS:** Multiple programs

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 6-8 of participating in 21st Century Community Learning Center programs during 2013-14. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 6	484	0.03 (0.09)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 7	362	0.04 (0.11)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 8	360	0.12 (0.11)
	Average effec	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.06

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 6	484	0.06 (0.09)	
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 7	362	0.04 (0.11)	
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 8	360	0.15 (0.11)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# 21st Century Community Learning Centers (West Virginia - Middle Grades - 2014-15)

West Virginia's 21st Century Community Learning Centers, offered in 2014-15, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- **Mathematics Achievement**
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

## Location

LOCALE



Suburban, Rural, Urban



Southeast

### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 6-8

Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Not Reported



Not Reported

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

**MAIN COMPONENTS:** Multiple programs

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 6-8 of participating in 21st Century Community Learning Center programs during 2014-15. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size		
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 6	312	0.03 (0.09)		
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 7	166	0.04 (0.11)		
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 8	194	0.15 (0.11)		
	Average effect size for Mathematics Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evid	ESSA evidence tier		Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 6	312	0.06 (0.09)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 7	166	0.04 (0.11)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 8	194	0.12 (0.11)
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	0.08

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# After School Education and Safety (San Francisco - Middle Grades)

### PROGRAM DESCRIPTION

The After School Education and Safety (ASE) initiative of the San Francisco Unified School District, offered in 31 schools in 2005-06, aimed to improve student achievement and decrease involvement in unhealthy behaviors through providing safe spaces, expanded learning opportunities and social service supports. ASE offered multicomponent programming that included three types of activities: education, enrichment/recreation, and life skills or drug and alcohol prevention. The programs were offered for the full school year.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

OUTCOMES THAT DID NOT MEET TIER I-III STANDARDS FOR CAUSALITY: Attendance & Enrollment Not measured for this intervention: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION Urban West

### **Participants**

**CLASS GRADE** 

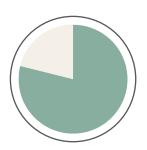
TARGET STUDENTS

RACE OR ETHNICITY

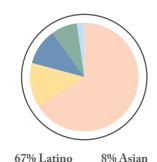
Grades 6-8

Low-Income

### SOCIO-ECONOMIC STATUS



79% Low-Income



67% Latino 8% Asian 13% White 2% Other 11% Black

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

MAIN COMPONENTS: Arts, sports, tutoring, drug/alcohol prevention, clubs, social skills activities

**BEST PRACTICES USED:** Family engagement

### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Not reported

STAFFING: Certified teachers, volunteers, program staff

**DURATION:** Full school year, no other info provided

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact on academic achievement and attendance of the After School Education and Safety Program for students in the elementary grades in San Francisco Unified School District. Outcomes for participants were compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 31 schools during 2005-06.

### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Proficient level on California Standards Test - mathematics	œ	œ	Middle grades	838	0.00 (0.07)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.00

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Proficient level on California Standards Test - English language arts	œ	00	Middle grades	839	-0.01 (0.07)
	Average effect	t size for Reading/ELA A	chievement outcor	nes at Tiers I-III	0.01

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Afterschool Program with All Stars Prevention Curriculum

### PROGRAM DESCRIPTION

Afterschool Program with All Stars Prevention Curriculum, offered in five Baltimore middle schools in 2005-06, aimed to increase school attendance and academic performance and reduce conduct problems. The program included traditional afterschool activities (snacks, sports, crafts), academic assistance, and the All Stars curriculum. The All Stars Curriculum focuses on reducing substance abuse and aggressive behavior and increasing social competency skills. The program was offered for 30 weeks, three days per week, three hours each day.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- General Achievement
- School Engagement
- Social & Emotional Competencies

NOT MEASURED FOR THIS INTERVENTION: Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, and Science Achievement

### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION

### **Participants**

Urban

**CLASS GRADE** 

TARGET STUDENTS

Northeast

Grades 6-8

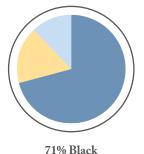
**General Population** 

### SOCIO-ECONOMIC STATUS

## RACE OR ETHNICITY







17% White 12% Other

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

MAIN COMPONENTS: Academic enrichment, arts/ recreation, substance use and violence prevention, social development

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** 30 weeks, 3 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of an afterschool program for students in grades 6-8 at five Baltimore middle schools during the 2006-07 school year. Among students who signed up for the program, half were randomly assigned to participate and half were assigned to the control group. Outcomes for students randomized to the program were compared to outcomes for students randomized to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **ATTENDANCE & ENROLLMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Days attended school	<b>◊</b>	<b>◊</b>	Grades 6-8	410	0.06 (0.10)
	Average effe	ect size for <i>Attendance</i> &	Enrollment outcor	mes at Tiers I-III	0.06

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Academic performance composite (GPA, test scores, teacher rating)	<b>◊</b>	$\Diamond$	Grades 6-8	410	0.06 (0.10)	
	Average	Average effect size for General Achievement outcomes at Tiers I-III				

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### **SCHOOL ENGAGEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Evaluator-created measure of attachment to school	$\Diamond$	<b>◊</b>	Grades 6-8	412	0.08 (0.10)
	Average	e effect size for School E	ngagement outcor	mes at Tiers I-III	0.08

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### **SOCIAL AND EMOTIONAL COMPETENCES**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Evaluator-created measure of social competence (goal setting, decision- making, impulsiveness)	<b>◊</b>	<b>◊</b>	Grades 6-8	396	0.09 (0.10)	
	Average effect size for Social & Emotional Competencies outcomes at Tiers I-III					

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

CITATIONS: Gottfredson, D. C., Cross, A. B., Wilson, D. M., Rorie, M., & Connell, N. (2010). Effects of participation in afterschool programs for middle school students: A randomized trial. *Journal of Research on Educational Effectiveness*, 3, 282-313.

Cross, A. B., Gottfredson, D. C., Wilson, D. M., Rorie, M., & Connell, N. (2009). The impact of afterschool programs on the routine activities of middle school students: Results from a randomized, controlled trial. *Criminology and Public Policy, 8*, 391-412.

Son, D. (2010). Racial differences in the effectiveness of after school programs (Unpublished master's thesis). University of Maryland, College Park, MD.

Cross, A. B. (2009). An experimental evaluation of after school program participation on problem behavior outcomes: Does pre-existing risk moderate the effects of program participation? (Unpublished doctoral dissertation). University of Maryland, College Park, MD.

Gottfredson, D. C., Cross, A. B., Wilson, D. M., Rorie, M., & Connell, N. (2010). An experimental evaluation of the All Stars Prevention Curriculum in a community after school setting. *Prevention Science*, *11*, 142-154.

# Santa Ana After School Learning and Safe Neighborhoods Partnerships Program

### **PROGRAM DESCRIPTION**

The Santa Ana After School Learning and Safe Neighborhoods Partnerships Program was implemented at four urban middle schools in the Santa Ana Unified School District in 1999-2000. The district partnered with community organizations to provide multicomponent afterschool programming that included homework help and academic enrichment as well as recreational and other enrichment programming. The program was offered for the full school year, three hours each day.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- Attendance & Enrollment
- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION Urban West

### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grades 6-8

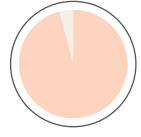
Low-Income

### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY







96% Latino

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

MAIN COMPONENTS: Sports, homework help

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Not reported

STAFFING: Certified teachers, volunteers, program staff

**DURATION:** Full school year, 3 hours/day

**IMPLEMENTATION SUPPORT:** Provider training

### STUDY DESCRIPTION

This study uses a quasi-experimental design to estimate the impact of attending the Santa Ana After School Learning and Safe Neighborhoods Partnerships Program on students at four middle schools in Santa Ana, California. Outcomes for participants were compared to outcomes for students who attended the same school but did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 1999-2000.

### ATTENDANCE & ENROLLMENT

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percentage of school days attended	00	∞	Grades 6-8	1,358	-0.03 (0.06)
	Average effe	ect size for <i>Attendance</i> &	Enrollment outcor	mes at Tiers I-III	-0.03

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Stanford Achievement Test 9 - mathematics	00	00	Grades 6-8	1,358	-0.06 (0.06)	
Average effect size for Mathematics Achievement outcomes at Tiers I-III						

 $<sup>\</sup>infty$  Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Stanford Achievement Test 9 - reading comprehension	∞	œ	Grades 6-8	1,358	-0.02 (0.06)
	Average effect	t size for <i>Reading/ELA Ad</i>	chievement outcor	mes at Tiers I-III	-0.02

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# School-to-Jobs

The School-to-Jobs program, offered in one middle school in Detroit, Michigan from 1995-99, aimed to shift the self-perceptions and school involvement of low-income urban African American middle school students. The program consisted of small-group activities that were designed to create a positive peer-based experience in which African American racial identity was implicitly tied to academic achievement. The program was offered for nine weeks, one day per week, for 1.5 hours each day.

### **EFFECTIVENESS AT A GLANCE**

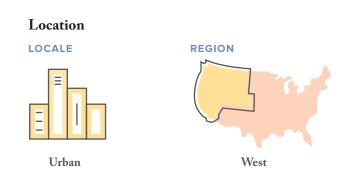
### No Effect

The study found neither improved nor negative outcomes for



School Engagement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Reading/ELA Achievement, Attendance & Enrollment, Science Achievement, and Social & **Emotional Competencies** 



### **Participants**

**CLASS GRADE** 

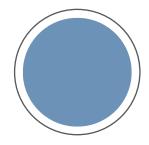
**TARGET STUDENTS** 

Grade 8

Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Not Reported

100% Black

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

MAIN COMPONENTS: None reported

BEST PRACTICES USED: Sequenced, active learning, positive adult-student relationships, family engagement, respect for student cultures

### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Specialized staffing, volunteers

**DURATION:** 9 weeks, 1 day/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the School-to-Jobs program, offered to eighth grade students in one middle school in Detroit. Outcomes for program participants are compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 1995-96, 1997-98, and 1998-99.

### **SCHOOL ENGAGEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
School bonding (Cernkovich and Giordano, 1992)	∞	∞	Grade 8	148	0.35 (0.18)
	Average	e effect size for School E	ngagement outcor	nes at Tiers I-III	0.35

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# Support Our Students (SOS)

### PROGRAM DESCRIPTION

The Support Our Students (SOS) program was a community-based afterschool initiative offered in North Carolina from 1998-2001 that aimed to improve academic performance, reduce juvenile crime, and improve students' attitudes and behaviors. SOS programs include at least four enrichment activities and one hour of homework time. Activities include dance clubs, drama clubs, intramural sports, or music activities. SOS is a multi-year program, but no other information about program duration is reported.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

### STUDY LOCATION AND PARTICIPANTS

# Location LOCALE REGION Urban Southeast

### **Participants**

**CLASS GRADE** 

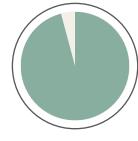
**TARGET STUDENTS** 

Grade 6

Low-Income

### SOCIO-ECONOMIC STATUS

### RACE OR ETHNICITY







81% White

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

MAIN COMPONENTS: Homework help, arts,

music, sports

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Not reported

**STAFFING:** Not reported

**DURATION:** Multi-year program

**IMPLEMENTATION SUPPORT:** None reported

### STUDY DESCRIPTION

The quasi-experiment compared outcomes for low-achieving sixth-grade students who participated in North Carolina's Support Our Students (SOS) afterschool program for three consecutive years (1998-99 through 2000-01), through eighth grade. The comparison students did not participate in SOS during those years. Outcomes for participants were compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
North Carolina End-of-Grade Test - mathematics	§	§	Grade 8	410	-0.08 (0.10)		
	Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III						

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
North Carolina End-of-Grade Test - reading	§	§	Grade 8	410	-0.05 (0.10)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# 21st Century Community Learning Centers (West Virginia – High School)

### **PROGRAM DESCRIPTION EFFECTIVENESS AT A GLANCE** West Virginia's 21st Century Community Learning No Effect Centers aimed to improve math and reading Overall, the studies found neither improved nor achievement of low-income students. Programs negative outcomes for served K-12 students throughout the state and were Mathematics Achievement operated by 33 separate programs. Afterschool Reading/ELA Achievement programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. A summer camp was also offered.

This review of 21st Century Community Learning Centers (West Virginia – High School) identified three studies of this program (two manuscripts report the same study). The findings from each of these studies are presented individually on pages 276 – 284 of this evidence guide.

- White, L., & Hixson N. (2014). 21st Century Community Learning Centers 2013: A quasi-experimental investigation
  of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West
  Virginia Department of Education, Division of Teaching and Learning, Office of Research.
- White, L. J. (2014). 21st Century Community Learning Centers: A descriptive evaluation for 2012-13. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.
- White, L. J., Hammer, P. C., & Whisman, A. (2015). 21st Century Community Learning Centers, 2014-2015: A
  descriptive evaluation. Charleston, WV: West Virginia Department of Education, Division of Teaching and
  Learning, Office of Assessment.
- White, L. J., & Whisman, A. (2015). 21st Century Community Learning Centers 2014: A quasi-experimental investigation of program impacts on student achievement in mathematics and reading/language arts.
   Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

# 21st Century Community Learning Centers (West Virginia - High School - 2012-13)

### **PROGRAM DESCRIPTION**

West Virginia's 21st Century Community Learning Centers, offered in 2012-13, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- **Mathematics Achievement**
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

# Location

LOCALE



Suburban, Rural, Urban



Southeast

### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

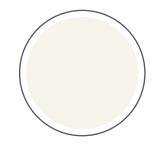
Grades 9-11

Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



Not Reported

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

**MAIN COMPONENTS:** Multiple programs

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, attendance range=2-93 days

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 9-11 of participating in 21st Century Community Learning Center programs during 2012-13. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 9	168	0.06 (0.15)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 10	96	0.03 (0.20)
West Virginia Educational Standads Test 2 - mathematics	§	§	Grade 11	96	0.16 (0.20)
	Average effec	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.08

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 9	168	0.15 (0.15)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 10	96	0.04 (0.20)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 11	96	0.36 (0.21)
	Average effect	size for Reading/ELA A	chievement outcor	nes at Tiers I-III	0.18

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATIONS:** White, L., & Hixson N. (2014). 21st Century Community Learning Centers 2013: A quasi-experimental investigation of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

White, L. J. (2014). 21st Century Community Learning Centers: A descriptive evaluation for 2012-13. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

# 21st Century Community Learning Centers (West Virginia - High School - 2013-14)

### **PROGRAM DESCRIPTION**

West Virginia's 21st Century Community Learning Centers, offered in 2013-14, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

## EFFECTIVENESS AT A GLANCE

### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

### STUDY LOCATION AND PARTICIPANTS

# Location



Suburban, Rural, Urban



Southeast

### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

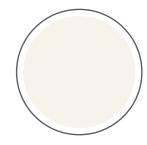
Grades 9-11

Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



**Not Reported** 

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

MAIN COMPONENTS: Multiple programs

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year, attendance range=2-93 days

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 9-11 of participating in 21st Century Community Learning Center programs during 2013-14. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 9	134	0.26 (0.17)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 10	116	0.08 (0.19)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 11	90	0.24 (0.21)
	Average effect	t size for <i>Mathematics A</i>	chievement outcor	mes at Tiers I-III	0.19

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 9	134	0.03 (0.17)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 10	116	0.14 (0.19)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 11	90	0.19 (0.21)
	Average effect	size for Reading/ELA A	chievement outcor	mes at Tiers I-III	0.12

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** White, L. J., & Whisman, A. (2015). 21st Century Community Learning Centers 2014: A quasi-experimental investigation of program impacts on student achievement in mathematics and reading/language arts. Charleston, WV: West Virginia Department of Education, Division of Teaching and Learning, Office of Research.

# 21st Century Community Learning Centers (West Virginia - High School - 2014-15)

### **PROGRAM DESCRIPTION**

West Virginia's 21st Century Community Learning Centers, offered in 2014-15, aimed to improve math and reading achievement of low-income students. Programs served K-12 students throughout the state and were operated by 33 separate programs. Afterschool programs offered a range of activities including STEM programming, vocational enrichment, and professional presenters on a range of topics. The programs were offered for the full school year.

### Location

LOCALE



Suburban, Rural, Urban

# **REGION**

Southeast

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for

- **Mathematics Achievement**
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 9-11

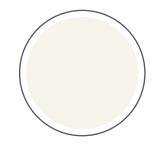
Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Not Reported



Not Reported

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

**MAIN COMPONENTS:** Multiple programs

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group and one-to-one formats

**STAFFING:** Program staff, volunteers

**DURATION:** Full school year

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact for West Virginia students in grades 9-11 of participating in 21st Century Community Learning Center programs during 2014-15. Outcomes for students who participated in the programs were compared to outcomes for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 9	66	0.01 (0.17)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 10	98	0.11 (0.19)
West Virginia Educational Standards Test 2 - mathematics	§	§	Grade 11	72	-0.18 (0.21)
	Average effect	t size for <i>Mathematics Ad</i>	chievement outcor	nes at Tiers I-III	-0.02

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### **READING/ELA ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 9	33	0.10 (0.17)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 10	98	0.34 (0.19)
West Virginia Educational Standards Test 2 - English language arts	§	§	Grade 11	72	0.11 (0.21)
	Average effect	size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	0.18

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# **Baltimore Community Schools (High School)**

Baltimore Community Schools programs, offered in 2012-14, took place at community schools serving low-income students in grades K-12. The programs were intended to promote academic success, health, social and emotional development, high school graduation, and college and career readiness. Programs were provided by various types of organizations and offer academic support, recreation, arts and sports activities. The programs were offered for the full school year, up to five days per week, for up to 4.5 hours per day.

### **EFFECTIVENESS AT A GLANCE**

### No Effect

The study found neither improved nor negative outcomes for



Attendance & Enrollment

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, School Engagement, Science Achievement, and Social & Emotional Competencies

# Location LOCALE REGION Urban Northeast

### **Participants**

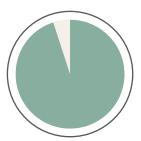
**CLASS GRADE** 

**TARGET STUDENTS** 

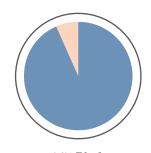
Grades 9-12

Low-Income

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



95% Low-Income



85% Black 6% Latino

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

MAIN COMPONENTS: Sports, homework help

**BEST PRACTICES USED:** Not reported

### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Full school year, up to 5 days/week, 3-4.5 hours/day

**IMPLEMENTATION SUPPORT:** Ongoing support

### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool programs in community schools, administered by the Family League of Baltimore. Outcomes for students who attended afterschool programs for at least 200 hours were compared to outcomes for students who did not attend the programs and did not attend a community school. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2012-14.

### **ATTENDANCE & ENROLLMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Chronic absenteeism (more than 20 days absent)	§	§	Grades 9-12	324	0.17 (0.11)
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					0.17

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

Physical Activity and Health

# America SCORES

### **PROGRAM DESCRIPTION**

America SCORES, offered in three schools in a large urban school district in 2009-10, was a soccer program that aimed to build competencies and skills, including teamwork, leadership, and academic commitment. In addition to soccer, the program also offered creative writing and service learning projects. Students spent two to three days per week in soccer drills or games for up to two hours each day, and on the other days engaged in creative writing (fall) and service learning (spring). The program was offered for 24 weeks (12 weeks in the fall and 12 weeks in the spring), five days per week.

### **EFFECTIVENESS AT A GLANCE**

### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies.

### STUDY LOCATION AND PARTICIPANTS

### Location

LOCALE



Urban

REGION



West

### **Participants**

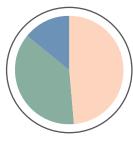
**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 4-5

**General Population** 

### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported

42% Latino 32% Asian

12% Black

### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

### **Program Content**

**MAIN COMPONENTS:** Sports, tutoring

**BEST PRACTICES USED:** Sequenced, active learning

### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION: 12** weeks in Fall and Spring, 5 days/week

**IMPLEMENTATION SUPPORT:** Program manual,

provider training, ongoing support

#### STUDY DESCRIPTION

In this study, three schools were randomized to participate in America SCORES and three schools were randomized to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2009-10.

	ESSA evidence tier			Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Moderate-to-vigorous physical activity	Tier II	Tier III	Grades 4-5	150	0.57 (0.17)*		
	Average effect size for Physical Activity/Health outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

### **FITKids**

#### **PROGRAM DESCRIPTION**

The FITKids (Fitness Improves Thinking) program consisted of physical activity including rotating among stations and playing games that developed particular physical skills, such as dribbling. The program also included a healthy snack and a brief education component focused on nutrition.

NOTE: The CATCH Kids Club program was a precursor to the FITKIDs program and is substantially similar. Therefore, findings from CATCH studies are included in the overall effectiveness summary for this program.

# This review of FITKids identified ten studies of this program. The findings from each of these studies are presented individually on pages 291 – 304 of this evidence guide.

- de Heer, H. (2009). Project L.E.A.N.: An afterschool health and exercise program for elementary school children in El Paso, Texas (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Databse (UMI No. 3358902)
- de Heer, H. (2009). A path analysis of an afterschool health and exercise program for elementary school children in El Paso, Texas (Master's thesis). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 1462432)
- de Heer, H. D., Koehly, L., Pederson, R., & Morera, O.
   (2011). Effectiveness and spillover of an afterschool health promotion program for Latino elementary school children.
   American Journal of Public Health, 101, 1907-1913.
- Gutin, B., Yin, Z., Johnson, M., & Barbeau, P. (2008). Preliminary findings of the effect of a 3-year afterschool physical activity intervention on fitness and body fat: The Medical College of Georgia FitKid Project. *International Journal of Pediatric Obesity*, 3, 3-9.
- Hillman, C. H., Pontifex, M. B., Castelli, D. M., Khan, N. A., Raine, L. B., Scudder, M. R., . . ., Kamijo, K. (2014). Effects of the FITKids randomized controlled trial on executive control and brain function. *Pediatrics*, 134, e1063-e1071.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

Overall, the studies found at least one improved outcome with no overriding contrary evidence for

Physical Activity/Health

#### No Effect

Overall, the studies found neither improved nor negative outcomes for

- Mathematics Achievement
- Other Achievement
- Reading/ELA Achievement
- Science Achievement
- Monti, J. M., Hillman, C. H., & Cohen, N. J. (2012). Aerobic fitness enhances relational memory in preadolescent children: The FITKids randomized control trial. *Hippocampus*, 22(9), 1876-1882.
- Rumph, M. K. (2011). Evaluation of CATCH Kids Club after school program: A nutrition and physical fitness intervention for third, fourth, and fifth graders (Master's thesis). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 1500125)
- Yin, Z., Hanes, J., Moore, J. B., Humbles, P., Barbeau, P., & Gutin, B. (2005). An afterschool physical activity program for obesity prevention in children: The Medical College of Georgia FitKid Project. Evaluation and the Health Professions, 28, 67-89.
- Yin, Z., Moore, J. B.., Johnson, M. H., Barbeau, P., Cavnar, M., Thornburg, J., & Gutin, B. (2005). The Medical College of Georgia FitKid Project: The relations between program attendance and changes in outcomes in year 1. *International Journal of Obesity*, 29, S40-S45.
- Yin, Z., Gutin, B., Johnson, M. H., Hanes, J., Moore, J. B., Cavnar, M., . . ., Barbeau, P. (2005). An environmental approach to obesity prevention in children: Medical College of Georgia FitKid Project year 1 results. *Obesity Research*, 13, 2153-2160.

# CATCH Kids Club program

#### **PROGRAM DESCRIPTION**

The CATCH (Coordinated Approach to Children's Health) Kids Club program, offered in 13 elementary schools in Oklahoma during 2009-10, was a precursor to the FITKids program. CATCH Kids Club focused on nutrition and physical activity for low-income students. The program aimed to improve children's physical activity levels as well as their knowledge, attitudes, and behaviors regarding healthy eating. The program was offered for 16 weeks, five days per week.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



REGION

Not Reported

Midwest

#### **Participants**

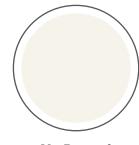
**CLASS GRADE** 

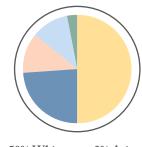
**TARGET STUDENTS** 

Grades 3-5

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Not Reported

50% White 3% Asian 24% Black

12% Latino

11% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, nutrition education

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Volunteers

**DURATION:** 16 weeks, 5 days/week

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the CATCH Kids Club for students in grades 3-5 in 13 elementary schools in Lawton, Oklahoma. Outcomes for program participants are compared to outcomes for students attending other schools in the district that did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2009-10.

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)	
Progressive Aerobic Cardiovascular Endurance Run (PACER) within or above Fitnessgram Healthy Fitness Zone	Tier III	Tier III	Grades 3-5	112	0.41 (0.19) *	
	Average effect size for Physical Activity/Health outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

# CATCH/Bienestar (El Paso – A)

#### **PROGRAM DESCRIPTION**

The CATCH/Bienestar afterschool program, offered in six elementary schools in El Paso, Texas during 2008, focused on health and physical activity and was targeted to Latino elementary school students in grades 3-5. The program used two interventions: Bienestar, a bilingual health education curriculum that was culturally tailored to Mexican Americans, and an adaptation of the CATCH (Coordinated Approach to Children's Health) curriculum, a precursor to FITKids, which focuses on physical activity and games. The program was offered for 12 weeks, two days per week, for up to 1.5 hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



#### **Participants**

**CLASS GRADE** 

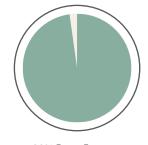
**TARGET STUDENTS** 

Grades 3-5

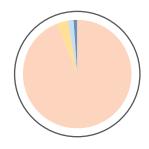
Latino Students

#### SOCIO-ECONOMIC STATUS R

RACE OR ETHNICITY



98% Low-Income



27% Latino3% Black12% White6% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Sequenced, respect for

student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: 12 weeks, 2 days/week, 1-1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual, provider

training, staff-student cultural similarity

#### STUDY DESCRIPTION

This randomized controlled trial was conducted in six elementary schools in El Paso, Texas, with third, fourth, and fifth grade classrooms randomized to the program or to the comparison condition. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2008.

\*NOTE: This study used a different sample of students from the CATCH/Bienestar (El Paso-B) study.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	§	§	Grades 3-5	931	-0.01 (0.07)
Progressive Aerobic Cardiovascular Endurance Run	§	§	Grades 3-5	931	0.06 (0.07)
	Average ef	fect size for <i>Physical Act</i>	<i>ivity/Health</i> outcor	mes at Tiers I-III	0.03

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

CITATIONS: de Heer, H. (2009). Project L.E.A.N.: An afterschool health and exercise program for elementary school children in El Paso, Texas (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3358902)

de Heer, H. (2009). A path analysis of an afterschool health and exercise program for elementary school children in El Paso, Texas (Master's thesis). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 1462432)

# CATCH/Bienestar (El Paso - B)

#### **PROGRAM DESCRIPTION**

The CATCH/Bienestar afterschool program, offered in six elementary schools in El Paso, Texas in 2008, focused on health and physical activity and was targeted to Latino elementary school children (3rd-5th grade). The program used two interventions: Bienestar, a bilingual health education curriculum that was culturally tailored to Mexican Americans, and an adaptation of the CATCH (Coordinated Approach to Children's Health) curriculum, a precursor to FITKids, which focuses on physical activity and games.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Southwest

#### **Participants**

**CLASS GRADE** 

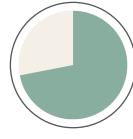
Grades 3-5

**TARGET STUDENTS** 

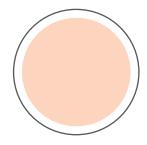
Latino Students

#### SOCIO-ECONOMIC STATUS R

RACE OR ETHNICITY



72% Low-Income



100% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Sequenced, respect for

student cultures

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: 12 weeks, 2 days/week, 1-1.5 hours/day

IMPLEMENTATION SUPPORT: Program manual, provider

training, staff-student cultural similarity

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of a health education and physical fitness program for students in six elementary schools in El Paso, Texas. Comparison students attended an afterschool program but did not participate in this intervention. The study was conducted in 2008.

\*NOTE: This study used a different sample of students from the CATCH/Bienestar (El Paso-A) study.

0.1	ESSA evidence tier		Croup	Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	∞	œ	Grades 3-5	568	-0.01 (0.08)
Progressive Aerobic Cardiovascular Endurance Run	<b>◊</b>	$\Diamond$	Grades 3-5	568	0.03 (0.08)
	Average ef	fect size for <i>Physical Act</i>	<i>ivity/Health</i> outcor	mes at Tiers I-III	0.01

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

# FITKids (Southeast)

#### **PROGRAM DESCRIPTION**

This FITKids afterschool program, offered at 18 schools in Georgia, aimed to increase fitness and reduce obesity of children in grades 3-5. The program offered moderate-to-vigorous physical activity for extended periods of time (40-80 minutes) after school. Activities included rotating among stations and playing games that developed specific physical skills. The program also included a healthy snack and a brief education component focused on nutrition. The program was offered for the full school year, five days per week, two hours each day. The implementation year was not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Physical Activity/Health

#### No Effect

The study found neither improved nor negative outcomes for

- Mathematics Achievement
- Other Achievement
- Reading/ELA Achievement
- Science Achievement

**NOT MEASURED FOR THIS INTERVENTION:** General Achievement, Other Achievement, Promotion & Graduation, School Engagement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Rural, Urban

REGION

Southeast

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grade 3

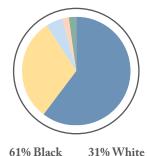
**General Population** 

#### **SOCIO-ECONOMIC STATUS**

RACE OR ETHNICITY



68% Low-Income



2% Latino
2% Asian

5% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Homework help, organized team sports, unstructured physical activities

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: Full school year, 5 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

In this randomized controlled trial, 18 schools in Georgia were randomly assigned to receive the intervention or to serve as comparison schools. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year was not reported.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - mathematics	§	§	Grade 3	426	-0.11 (0.10)
	Average effect	t size for <i>Mathematics Ad</i>	chievement outcor	nes at Tiers I-III	-0.11

§ Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **OTHER ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - social studies	§	§	Grade 3	426	-0.01 (0.10)
	Averag	e effect size for Other A	chievement outcor	mes at Tiers I-III	-0.01

§ Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	<b>∞</b>	∞	Grade 3	447	0.03 (0.10)
Bone mineral density	œ	∞	Grade 3	447	0.13 (0.10)
Diastolic blood pressure	œ	∞	Grade 3	447	0.19 (0.10)
HDL cholesterol	<b>∞</b>	∞	Grade 3	447	0.15 (0.10)
Heart rate	Tier II	Tier II	Grade 3	447	0.27 (0.10) *
Percent body fat	<b>∞</b>	∞	Grade 3	447	0.08 (0.10)
Systolic blood pressure	Tier II	Tier II	Grade 3	447	0.19 (0.10) *
Waist circumference (cm)	∞	∞	Grade 3	447	0.04 (0.10)
	Average eff	fect size for <i>Physical Act</i>	ivity/Health outcor	nes at Tiers I-III	0.14

<sup>\*</sup> Statistically significant at p<.05

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - English language arts	§	§	Grade 3	426	0.00 (0.10)
Georgia Criterion- Referenced Competency Test - reading	§	§	Grade 3	426	0.01 (0.10)
	Average effect	size for <i>Reading/ELA A</i>	chievement outcor	nes at Tiers I-III	0.00

§ Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SCIENCE ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Georgia Criterion- Referenced Competency Test - science	§	§	Grade 3	426	-0.07 (0.10)
	Average	effect size for <i>Science Ad</i>	chievement outcor	nes at Tiers I-III	-0.07

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATIONS:** Gutin, B., Yin, Z., Johnson, M., & Barbeau, P. (2008). Preliminary findings of the effect of a 3-year afterschool physical activity intervention on fitness and body fat: The Medical College of Georgia FITKid Project. *International Journal of Pediatric Obesity*, 3, 3-9.

Yin, Z., Hanes, J., Moore, J. B., Humbles, P., Barbeau, P., & Gutin, B. (2005). An afterschool physical activity program for obesity prevention in children: The Medical College of Georgia FITKid Project. *Evaluation and the Health Professions*, 28, 67-89.

Yin, Z., Moore, J. B., Johnson, M. H., Barbeau, P., Cavnar, M., Thornburg, J., & Gutin, B. (2005). The Medical College of Georgia FITKid Project: The relations between program attendance and changes in outcomes in year 1. *International Journal of Obesity, 29*, S40-S45.

Yin, Z., Gutin, B., Johnson, M. H., Hanes, J., Moore, J. B., Cavnar, M., . . ., Barbeau, P. (2005). An environmental approach to obesity prevention in children: Medical College of Georgia FITKid Project year 1 results. *Obesity Research*, *13*, 2153-2160.

# FITKids (Midwest - A)

#### **PROGRAM DESCRIPTION**

This FITKids afterschool program, offered at a recreational facility at the University of Illinois campus from 2009-2013, aimed to increase fitness and reduce obesity of children in grades 3-5. The program offered moderate-to-vigorous physical activity for extended periods of time (average 70 minutes), followed by a healthy snack and a brief education component focused on nutrition and low-organization games that developed specific physical skills. The program was offered for the full school year, five days per week, two hours each day (a total of 150 days).

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

# REGION

Midwest

#### **Participants**

**CLASS GRADE** 

Ages 7-9

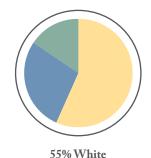
**TARGET STUDENTS** 

**General Population** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



43% Low-Income



27% Black 15% Asian

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, social skills development, nutrition education

natifical cadeation

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers, volunteers

DURATION: Full school year, 5 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Program manual, provider

training, ongoing support

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of FITKids for students ages 7-9. Outcomes for participants are compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted from 2009-13.

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	<b>◊</b>	<b>◊</b>	Ages 7-9	221	0.15 (0.14)
Maximal oxygen consumption, normed percentile	<b>◊</b>	<b>◊</b>	Ages 7-9	221	0.21 (0.14)
	Average ef	fect size for <i>Physical Act</i>	ivity/Health outcor	mes at Tiers I-III	0.18

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

# FITKids (Midwest - B)

#### **PROGRAM DESCRIPTION**

This FITKids afterschool program, offered in Illinois, aimed to increase fitness and reduce obesity of children in grades 3-5. The program offered moderate-to-vigorous physical activity for extended periods of time (average 70 minutes), followed by a healthy snack and a brief education component focused on nutrition and low-organization games that developed specific physical skills. The program was offered for the full school year, five days per week, two hours each day. The program intervention year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

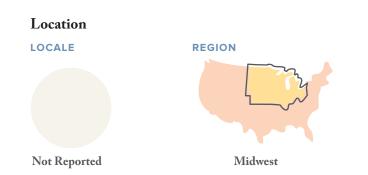
#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

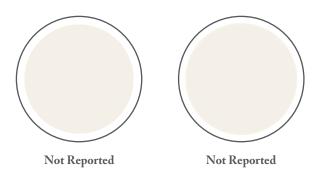


#### **Participants**

CLASS GRADE TARGET STUDENTS

Average Age: 9 General Population

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, social skills development, nutrition education

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group format

**STAFFING:** Volunteers

**DURATION:** Full school year, 5 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This study randomly assigned students to participate in the program or to the comparison group. Outcomes for participants are compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

	ESSA evid	idence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Maximal oxygen consumption	§	§	Age 9	44	0.54 (0.31)	
	Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Georgia Prevention Institute Physical Activity Program

#### **PROGRAM DESCRIPTION**

The Georgia Prevention Institute's Physical Activity Program, offered in eight schools in Georgia, aimed to improve cardiovascular fitness in Black elementary school girls. The program involved daily physical activity including skills instruction, aerobic activity, and strengthening and stretching activities. The program also included homework help. The program was offered for the full school year, five days per week, two hours each day. The implementation year is not reported.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



REGION

Not Reported

Southeast

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 3-5

**Active Black Girls** 

**EFFECTIVENESS AT A GLANCE** 

#### **Mixed Effects**

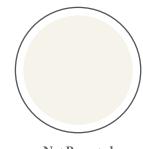
The study found a mix of improved outcomes and null or negative outcomes for

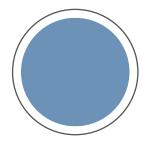
NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement,

Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

Physical Activity/Health

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Not Reported

100% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, homework help

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: Full school year, 5 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Program manual, provider

training, ongoing support

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of an afterschool physical activity program for Black girls in grades 3-5 from eight schools in Georgia. Outcomes for students randomly assigned to participate in the program are compared to outcomes for students randomly assigned to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Body mass index	$\Diamond$	$\Diamond$	Grades 3-5	201	0.08 (0.14)	
Bone mineral density	$\Diamond$	$\Diamond$	Grades 3-5	201	0.26 (0.14)	
Graded treadmill test	Tier I	Tier III	Grades 3-5	201	0.31 (0.14)*	
Percentage body fat	$\Diamond$	$\Diamond$	Grades 3-5	201	0.17 (0.14)	
Subcutaneous abdominal adipose tissue (cubic centimeters)	$\Diamond$	$\Diamond$	Grades 3-5	110	0.10 (0.19)	
Visceral adipose tissue (cubic centimeters)	$\Diamond$	$\Diamond$	Grades 3-5	110	0.23 (0.20)	
Waist circumference (cm)	$\Diamond$	$\Diamond$	Grades 3-5	201	0.11 (0.14)	
	Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### Girls in the Game

#### **PROGRAM DESCRIPTION**

The Girls in the Game program, offered at five schools in Chicago, aimed to foster social-emotional development and reduce BMI for urban, low-income Black and Latina elementary school girls. The program sought to empower girls to make healthy choices through physical activity in traditional and non-traditional sports, fitness activities, education activities focused on health and nutrition, and leadership and life skills. Materials were sent home for families to reinforce the programming messages. The program was offered for the full school year, one day per week, 1.5 hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Mixed Effects**

The study found a mix of improved outcomes and null or negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

#### REGION



Midwest

#### **Participants**

**CLASS GRADE** 

Grades 3-5

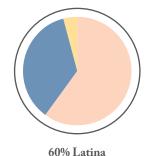
**TARGET STUDENTS** 

Low-Income Black and Latina Girls

#### **SOCIO-ECONOMIC STATUS** RACE OR ETHNICITY



Not Reported



36% Black 4% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

BEST PRACTICES USED: Sequenced, active learning,

family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: Full school year, 1 day/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual, provider

training, staff-student cultural similarity

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of Girls in the Game for students in grades 3-5 at five schools in Chicago. Outcomes for those randomized to the program are compared to those who were randomized to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

Outcome	ESSA evid	dence tier		Number of students	Effect size (Standard error)
	Without site and sample criteria	With site and sample criteria	Group		
Body mass index	§	§	Grades 3-5	68	0.06 (0.27)
Consumption of fruits and vegetables	œ	œ	Grades 3-5	76	-0.02 (0.25)
Consumption of unhealthy foods	œ	œ	Grades 3-5	76	0.36 (0.25)
Physical activity	Tier II	Tier II	Grades 3-5	76	0.54 (0.25)*
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

 $<sup>\</sup>infty$  Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# LA Sprouts

#### **PROGRAM DESCRIPTION**

LA Sprouts, offered in Los Angeles in 2010, was a 12-week gardening, nutrition, and cooking intervention that encouraged healthy eating and aimed to reduce the risk of obesity and other metabolic disorders among Latino students in grades 4-5. Nutrition lessons focused on increasing fruit and vegetable intake, including culturally relevant foods. Students prepared a sample recipe each week and participated in planting, growing, maintaining, and harvesting organic fruits and vegetables. The program incorporated parents into several gardening and nutrition sessions. The program was offered for 12 weeks, one day per week, for 1.5 hours.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

# REGION

West

#### **Participants**

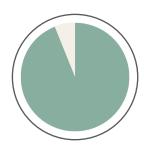
**CLASS GRADE** 

Grades 4-5

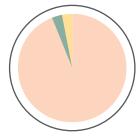
**TARGET STUDENTS** 

Latino Students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



94% of students at school qualify for free or reduced-price lunch



94% Latino 3% Asian 3% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENT: Nutrition education

BEST PRACTICES USED: Sequenced, active learning,

family engagement, cultural elements

#### Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

STAFFING: Program staff, specialized staffing

DURATION: 12 weeks, 1 day/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of LA Sprouts for students in grades 4-5 in one elementary school in Los Angeles. Outcomes for participants are compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2010.

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Added sugar (tsp)	∞	∞	Grades 4-5	98	0.14 (0.21)
Body mass index	§	§	Grades 4-5	104	0.04 (0.21)
Caloric intake	œ	œ	Grades 4-5	98	0.06 (0.21)
Dairy servings/day	∞	œ	Grades 4-5	98	0.00 (0.21)
Diastolic blood pressure	∞	∞	Grades 4-5	104	0.17 (0.21)
Fiber intake	Tier II	Tier III	Grades 4-5	98	0.99 (0.23) *
Fruit servings/day	∞	œ	Grades 4-5	98	-0.25 (0.21)
Meat servings/day	∞	œ	Grades 4-5	98	0.06 (0.21)
Percent carbohydrate calories	∞	$\infty$	Grades 4-5	98	-0.11 (0.21)
Percent fat calories	∞	œ	Grades 4-5	98	0.19 (0.21)
Percent protein calories	œ	œ	Grades 4-5	98	0.19 (0.21)

#### PHYSICAL ACTIVITY/HEALTH CONTINUED

Vegetable servings/day	Tier II	Tier III	Grades 4-5	98	0.60 (0.22) *
Waist circumference (cm)	œ	∞	Grades 4-5	104	0.04 (0.21)
Weight (kg)	§	8	Grades 4-5	104	0.03 (0.21)
Whole grains oz/day	∞	∞	Grades 4-5	98	0.31 (0.21)
Average effect size for Physical Activity/Health outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

**CITATIONS:** Gatto, N. M., Ventura, E. E., Cook, L. T., Gyllenhammer, L. E., & Davis, J. N. (2012). LA Sprouts: A garden-based nutrition intervention pilot program influences motivation and preferences for fruits and vegetables in Latino youth. *Journal of the Academy of Nutrition and Dietetics*, *112*, 913-920.

Davis, J. N., Ventura, E. E., Cook, L. T., Gyllenhammer, L. E., & Gatto, L. M. (2011). LA Sprouts: A gardening, nutrition, and cooking intervention for Latino youth improves diet and reduces obesity. *Journal of the American Dietetic Association*, 111, 1224-1230.

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

# Youth Fit for Life

PROGRAM DESCRIPTION	EFFECTIVENESS AT A GLANCE
This Youth Fit for Life program aimed to increase the health and fitness, mood, and self-appraisals of students ages 9-12. The program involved students in vigorous physical activity through non-competitive games and resistance training. Participants also received health and nutrition education and self-management/self-regulatory skills training.	Positive Effect  Overall, the studies found at least one improved outcome with no overriding contrary evidence for  Physical Activity/Health

# This review of Youth Fit for Life identified 10 studies of this program. The findings from each of these studies are presented individually on pages 313 – 316 of this document.

- Annesi, J. J. (2006). Relations of physical self-concept and self-efficacy with frequency of voluntary physical activity in preadolescents: Implications for afterschool care programming. *Journal of Psychosomatic Research, 61*(4), 515-520.
- Annesi, J. J., Faigenbaum A. D., Westcott, W. L. & Smith A. E. (2008). Relations of self-appraisal and mood changes
  with voluntary physical activity changes in African American preadolescents in an afterschool care intervention. *Journal of Sports Science and Medicine*, 7, 260-268.

# Youth Fit for Life - YMCA

#### **PROGRAM DESCRIPTION**

This Youth Fit for Life program, offered at a YMCA in 2003, aimed to increase the health and fitness, mood, and self-appraisals of students ages 9-12. The program involved students in vigorous physical activity through non-competitive games and resistance training. Participants also received health and nutrition education and self-management/self-regulatory skills training. The program was offered for 12 weeks, three days per week, 45 minutes each day.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

Southeast

# REGION

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

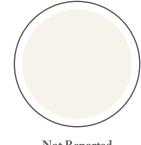
Ages 9-12

TARGET STUDENTS

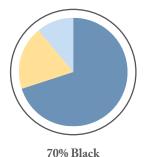
**General Population** 

#### SOCIO-ECONOMIC STATUS RACE O

RACE OR ETHNICITY



Not Reported



19% White 11% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, social skills activities

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

**STAFFING:** Specialized staffing

DURATION: 12 weeks, 3 days/week, 45 minutes/day

IMPLEMENTATION SUPPORT: Program manual, provider

training, ongoing support

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of Youth Fit for Life (YFL) for a group of students attending a YMCA afterschool program. Outcomes for participants are compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2003.

	ESSA evid	dence tier	Number of		Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Physical activity	00	∞	Ages 9-12	81	0.36 (0.22)
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

### Youth Fit for Life - School Site

#### **PROGRAM DESCRIPTION**

This Youth Fit for Life program, offered at a school site, aimed to increase the health and fitness, mood, and self-appraisals of students ages 9-12. The program involved students in vigorous physical activity through non-competitive games and resistance training. Participants also received health and nutrition education and self-management/self-regulatory skills training. The program was offered for 12 weeks, three days per week, 45 minutes each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Not Reported

Southeast

# REGION

#### **Participants**

**CLASS GRADE** 

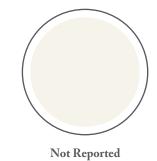
**TARGET STUDENTS** 

Ages 9-12

**General Population** 

#### **SOCIO-ECONOMIC STATUS**

RACE OR ETHNICITY





#### 100% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, social skills activities

**BEST PRACTICES USED:** Sequenced

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: 12 weeks, 3 days/week, 45 minutes/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of Youth Fit for Life for Black preadolescents (average age 10 years). Outcomes for participants are compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Physical activity	Tier II	Tier III	Ages 9-12	269	0.40 (0.12)*
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

# Fitness-Focused Afterschool Programs (California)

#### **PROGRAM DESCRIPTION**

These fitness-focused afterschool programs, offered by a community in the San Francisco Bay area from 2006-09, were offered by city departments, school districts, and four nonprofit organizations. Examples of fitness activities offered by these programs included soccer, dance, and yoga. More detailed information about the programs or their duration is not reported.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Not Reported



### **Participants**

**CLASS GRADE** 

Grades 5-7

**TARGET STUDENTS** 

**General Population** 

# **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement,

Promotion & Graduation, Reading/ELA Achievement,

Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

Physical Activity/Health

#### SOCIO-ECONOMIC STATUS





62% Low-Income



63% Latino 27% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School and community sites

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment uses administrative data from local afterschool providers and from local afterschool programs and two school districts in one California community. Outcomes for participants are compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted from 2006–09.

#### PHYSICAL ACTIVITY/HEALTH

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Body mass index	§	§	Grades 5-7	1,105	-0.07 (0.06)
California Physical Fitness Test	Tier III	Tier III	Grades 5-7	1,105	0.23 (0.06)*
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

§ Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## Girls on the Move

#### **PROGRAM DESCRIPTION**

The Girls on the Move program, offered in Kentwood and Lansing, Michigan in 2014-15, aimed to increase math achievement and executive functioning in low-income girls in grades 5-8 through moderate-to-vigorous physical activity. Programming focused on providing enjoyable daily physical activities with a choice of active games, dance/aerobics, walking, or sports. The program was offered for 17 weeks, three days per week.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

Midwest



#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found a mix of improved outcomes and null or negative outcomes for

Mathematics Achievement

#### **Mixed Effects**

The study found a mix of improved outcomes and null or negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

Low-Income Girls

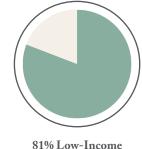
**TARGET STUDENTS** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY

Grades 5-8







Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION: 17 weeks, 3 days/week** 

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of Girls on the Move (GOTM) for girls in grades 5-8 in Kentwood and Lansing, Michigan. Schools were randomized to receive GOTM or to serve as a control. Outcomes for participants are compared to those for non-participants. The comparison students experienced "business as usual," which could have included other school-and community-sponsored afterschool activities. The study was conducted in 2014-15.

#### PHYSICAL ACTIVITY/HEALTH

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	<b>◊</b>	<b>◊</b>	Grades 5-8	150	-0.02 (0.16)
Maximal oxygen consumption	$\Diamond$	<b>◊</b>	Grades 5-8	150	-0.17 (0.16)
Moderate-to-vigorous physical activity	Tier I	Tier III	Grades 5-8	150	-0.33 (0.16)*
Percent body fat	<b>◊</b>	<b>◊</b>	Grades 5-8	150	0.18 (0.16)
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Woodcock-Johnson III - applied problems	Tier I	Tier III	Grades 5-8	150	0.34 (0.16)*
Woodcock-Johnson III - math fluency	Tier I	Tier III	Grades 5-8	150	1.20 (0.18)*
Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

<sup>\*</sup> Statistically significant at p<.05

# Student-Centered Physical Activity Program

#### **PROGRAM DESCRIPTION**

The student-centered physical activity program, offered in one rural South Carolina school, aimed to increase the amount of physical activity experienced by low-income underserved students ages 10-12, as well as their motivation for such activity. The program allowed participants a choice of physical activities and included motivational and behavioral skills training to increase their physical activity outside of the program. The program also offered homework help. The program was offered for four weeks, three days per week, two hours each day. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Rural



Southeast

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grade 6

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



83% Low-Income



83% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, positive identity/selfconcept activities, homework help

**BEST PRACTICES USED:** Sequenced, active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Program staff, specialized staffing

**DURATION:** 4 weeks, 3 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool physical activity program for sixth grade students from a rural South Carolina middle school who volunteered to attend the program. Outcomes for participants are compared to outcomes for sixth grade students from a nearby middle school. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

Outcome	ESSA evid	dence tier	Number of		Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Moderate-to-vigorous physical activity	Tier III	Tier III	Grade 6	48	1.15 (0.32) *
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

# **Afterschool Exercise Program**

#### **PROGRAM DESCRIPTION**

The afterschool exercise program, offered in the Augusta, Georgia area from 2003-05, engaged healthy but overweight children in aerobic exercise for 20-40 minutes per day for about 15 weeks. Exercise activities, selected based on ability to elicit a heart rate of more than 150 beats per minute, included running games, jump rope, soccer, and basketball. The program was staffed by researchers who were studying the program and was overseen by a physical educator.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

Southeast



#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

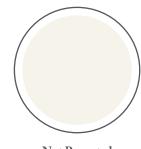
**CLASS GRADE** 

Ages 7-11

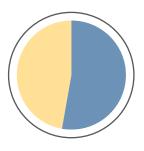
**TARGET STUDENTS** 

Healthy but **Overweight Students** 

#### **SOCIO-ECONOMIC STATUS** RACE OR ETHNICITY



Not Reported



53% Black 47% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION: 14 to 15 weeks** 

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of an aerobic exercise program for students ages 7-11 in the Augusta, Georgia area. Outcomes for participants are compared to those who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted from 2003-05.

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	<b>◊</b>	<b>◊</b>	Ages 7-11	100	Cannot determine
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### Scouting Nutrition & Activity Program

#### **PROGRAM DESCRIPTION**

The Scouting Nutrition & Activity Program, offered in seven Girl Scout troops in the Midwest in 2007-08, aimed to increase physical activity, healthy eating, and obesity-prevention behaviors for fourth and fifth grade girls. The program took place in regular Girl Scout troop meetings and included education sessions on healthy eating habits based on a Girl Scout curriculum and physical activities. Girls were given badge assignments to complete at home with parent assistance. The program was offered for six months, every week or every other week, for 1-2 hours per session.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban



Midwest

### **Participants**

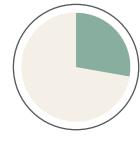
**CLASS GRADE** 

**TARGET STUDENTS** 

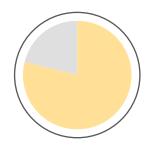
Grades 4-5

Girl Scouts

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



28% Low-Income



79% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Family engagement

#### Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** 6 months, weekly or bi-monthly 1-2 hour sessions

**IMPLEMENTATION SUPPORT:** Provider training,

ongoing support

#### STUDY DESCRIPTION

This randomized controlled trial involved seven Girl Scout troops, three randomly assigned to experience the program and four assigned to the comparison group. Outcomes for participants are compared to those who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2007-08.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	$\Diamond$	<b>◊</b>	Grades 4-5	72	0.00 (0.24)
Consumption of sugary beverages	$\Diamond$	<b>◊</b>	Grades 4-5	72	-0.33 (0.24)
Daily servings of fruits and vegetables	<b>◊</b>	<b>◊</b>	Grades 4-5	72	-0.06 (0.24)
Eating while watching television	<b>◊</b>	<b>◊</b>	Grades 4-5	72	-0.42 (.0.24)
Moderate-to-vigorous physical activity	<b>◊</b>	<b>◊</b>	Grades 4-5	72	0.39 (0.24)
	Average ef	fect size for <i>Physical Act</i>	<i>ivity/Health</i> outcor	mes at Tiers I-III	0.00

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### PHYSICAL ACTIVITY AND HEALTH PROGRAMS

### **GEMS**

#### **PROGRAM DESCRIPTION**

The GEMS program, offered to youth in Oakland and Palo Alto, California, aimed to reduce television viewing and prevent weight gain among overweight Black girls ages 8-10. Participants had a Body Mass Index ≥ 50th percentile and at least one parent/guardian who was overweight. The program consisted of daily one-hour dance classes with the aim of encouraging physical activity and fostering weight reduction. The intervention also included homework time and discussion about the meaning of dance in African American culture. The program was offered for 12 weeks, five days per week, 2.5 hours each day. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

# REGION

West

**Participants** 

**CLASS GRADE** 

Ages 8-10

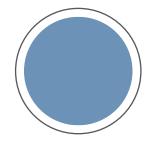
Black Girls

**TARGET STUDENTS** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



72% with household income <\$40,000



100% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Dance** 

**BEST PRACTICES USED:** Positive adult-student relationships, family engagement, respect for student cultures

#### Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

**STAFFING:** Volunteers

DURATION: 12 weeks, 5 days/week, 2.5 hours/day

**IMPLEMENTATION SUPPORT:** Staff-student cultural similarity

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of the GEMS program for Black girls with a BMI ≥ 50th percentile and at least one parent/guardian who was overweight. Students in the comparison group participated in a health education program focused on promoting healthful diet and activity patterns. The study was conducted with youth from Oakland and Palo Alto, California. The implementation year is not reported.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evidence tier			Number of	Effect size
Outcome	Outcome  Without site and  sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	<b>◊</b>	$\Diamond$	Ages 8-10	60	0.06 (0.26)
Caloric intake	<b>◊</b>	$\Diamond$	Ages 8-10	60	-0.14 (0.26)
Moderate-to-vigorous physical activity	<b>◊</b>	$\Diamond$	Ages 8-10	59	0.12 (0.26)
Percent of caloric intake from fat	<b>◊</b>	$\Diamond$	Ages 8-10	60	0.05 (0.26)
Waist circumference	<b>◊</b>	$\Diamond$	Ages 8-10	60	0.04 (0.26)
	Average eff	fect size for <i>Physical Act</i>	<i>ivity/Health</i> outcor	mes at Tiers I-III	0.03

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### **Girlfriends for KEEPS**

#### **PROGRAM DESCRIPTION**

The Girlfriends for KEEPS (Keys to Eating, Exercising, Playing and Sharing) program, offered in three elementary schools in Minnesota, aimed to reduce obesity in Black girls ages 8-10 with a BMI of 25 or above. The program sought to increase the girls' participation in moderate-to-vigorous physical activity and healthy eating. The program also included a family education component that reinforced healthy eating and activity messages. The program was offered for 12 weeks, two days per week, one hour each day. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Not Reported



Midwest

### **Participants**

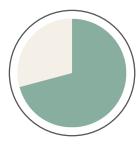
**CLASS GRADE** 

Ages 8-10

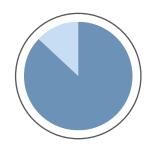
TARGET STUDENTS

Black Girls with BMI>24

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



71% with household income <\$40,000



87% Black 13% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENTS: Sports** 

**BEST PRACTICES USED:** Family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: 12 weeks, 5 days/week, 2.5 hours/day

**IMPLEMENTATION SUPPORT:** Provider training, ongoing

support, staff-student cultural similarity

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact on physical activity and nutrition of Girlfriends for KEEPS for girls ages 8-10 with a BMI of 25 or above. The comparison group was assigned to participate in three Saturday morning enrichment sessions that did not include physical activity or nutrition programming. The implementation year is not reported.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evid	dence tier		Number of	Effect size		
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)		
Body mass index	<b>◊</b>	$\Diamond$	Ages 8-10	53	-0.19 (0.28)		
Caloric intake	<b>◊</b>	<b>◊</b>	Ages 8-10	53	0.40 (0.28)		
Fruit and vegetable servings/day	<b>◊</b>	<b>◊</b>	Ages 8-10	53	-0.29 (0.28)		
Moderate-to-vigorous physical activity	<b>◊</b>	$\Diamond$	Ages 8-10	53	0.06 (0.27)		
Percent of caloric intake from fat	<b>◊</b>	<b>◊</b>	Ages 8-10	53	0.18 (0.28)		
Sweetened beverage servings/day	<b>◊</b>	<b>◊</b>	Ages 8-10	53	-0.24 (0.28)		
Waist circumference (cm)	<b>◊</b>	$\Diamond$	Ages 8-10	53	-0.50 (0.28)		
	Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III						

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### Physical Activity Program For Boys

#### **PROGRAM DESCRIPTION**

This physical activity program for boys, offered at five elementary schools in Georgia, aimed to prevent excessive weight gain and increase the cardiovascular fitness of Black boys in grades 3-5. The program focused on engaging youth in vigorous physical activity, physical skills development, and toning and stretching. The program was offered for the full school year, five days per week, two hours each day. The implementation year is not reported.

### Location LOCALE

Not Reported

REGION

STUDY LOCATION AND PARTICIPANTS



Southeast

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

**Participants** 

**CLASS GRADE** 

**TARGET STUDENTS** 

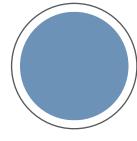
Grades 3-5

**Black Boys** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY







100% Black

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, homework help

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

STAFFING: Certified teachers, program staff

DURATION: Full school year, 5 days/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This randomized controlled trial involved students from five elementary schools in Georgia. Outcomes for those randomized to the program are compared to those who were randomized to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evid	dence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Body mass index	<b>◊</b>	$\Diamond$	Grades 3-5	106	0.01 (0.20)	
Bone mineral density	<b>◊</b>	$\Diamond$	Grades 3-5	106	0.00 (0.20)	
Maximal oxygen consumption	<b>◊</b>	<b>◊</b>	Grades 3-5	106	-0.03 (0.20)	
Percent body fat	<b>◊</b>	<b>◊</b>	Grades 3-5	106	0.02 (0.20)	
Waist circumference (cm)	<b>◊</b>	<b>◊</b>	Grades 3-5	106	0.01 (0.20)	
	Average effect size for Physical Activity/Health outcomes at Tiers I-III					

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

### **SPARK Program**

#### **PROGRAM DESCRIPTION**

The Sports, Play and Active Recreation for Kids (SPARK) program, offered in a suburban New England school in 2014-15, aimed to develop the cardiovascular fitness and motor skills of fifth grade students. The program was guided by the SPARK curriculum, which offered aerobic endurance and pacing activities as well as physically active, cooperative games. The program was offered for 10 weeks, two days per week, 1.5 hours each day.

### EFFECTIVENESS AT A GLANCE

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban



Northeast

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

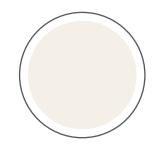
Grade 5

**General Population** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

DURATION: 10 weeks, 2 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates outcomes for three groups of fifth grade students: (1) students who participated in a SPARK afterschool program, compared to those who did not participate in SPARK,(2) students who participated in a SPARK afterschool program and an in-school SPARK program; and (3) students who participated in the afterschool SPARK program only. The study was conducted in 2014-15.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Mile run time	§	§	Afterschool SPARK + district phys ed vs. district phys ed	40	0.07 (0.35)
Mile run time	§	§	Afterschool SPARK + in-school SPARK vs. in-school SPARK	55	-0.15 (0.27)
Number of curl-ups	§	§	Afterschool SPARK + in-school SPARK vs. in-school SPARK	55	0.31 (0.27)
Number of curl-ups	§	8	Afterschool SPARK + district phys ed vs. district phys ed	40	0.10 (0.35)
Number of push-ups	§	8	Afterschool SPARK + district phys ed vs. district phys ed	40	-0.31 (0.35)
Number of push-ups	œ	œ	Afterschool SPARK + in-school SPARK vs. in-school SPARK	55	-0.20 (0.27)
Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** Gross, C. (2016). The effect of an evidence based physical education curriculum and/or an after school activity program on cardiovascular endurance and fundamental motor skill proficiency in grade 5 (Doctoral dissertation, Plymouth State University). Retrieved from http://digitalcommons. plymouth.edu/etd/104

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

### **Afterschool Physical Activity Program**

#### **PROGRAM DESCRIPTION**

This program, offered at two urban middle schools in the Mountain West region, aimed to increase students' daily levels of physical activity through afterschool football, basketball, soccer, and volleyball. Each 50-minute session included a warm-up, technique and strategy exercises, and a competition. The program was offered for two months, five days per week, 50 minutes each day. The implementation year is not reported.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



West

**REGION** 

Urban

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 7-8

**General Population** 

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

**EFFECTIVENESS AT A GLANCE** 

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY





82% White 10% Latino

2% Black 6% Other

#### Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science

NOT MEASURED FOR THIS INTERVENTION: General

Achievement, and Social & Emotional Competencies

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Specialized staffing, volunteers

DURATION: 2 months, 5 days/week, 50 minutes/day

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

In this randomized controlled trial, seventh and eighth grade students in two urban public schools who volunteered to participate in the study were randomly selected to participate in the program or to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study authors do not report the implementation year.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Physical Activity Self-Efficacy Scale (Bartholomew, Loukas, Jowers, & Allus, 2006)	<b>◊</b>	<b>◊</b>	Grades 7-8	98	Cannot determine	
Physical Activities Questionnaire for Children (PAQ-C)	<b>◊</b>	<b>◊</b>	Grades 7-8	98	Cannot determine	
	Average effect size for <i>Physical Activity/Health</i> outcomes at Tiers I-III					

 $<sup>\</sup>Diamond$  Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

#### PHYSICAL ACTIVITY AND HEALTH PROGRAMS

### <u>COPETEEN</u>

#### **PROGRAM DESCRIPTION**

COPE TEEN, offered in two suburban high schools in New York state, aimed to help overweight teens lose weight and develop healthy behaviors and lifestyles. The intervention consisted of cognitive behavioral skill-building as well as physical activity. The curriculum that focused on topics including nutrition education, emotional and behavioral regulation, self-esteem, coping with stress, goal setting and problem solving. The program also educated parents on ways to support their children's weight loss and healthy behavior. The program was offered over nine weeks, 1-2 days per week, for up to 1.5 hours each day. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Physical Activity/Health

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban



Northeast

### **Participants**

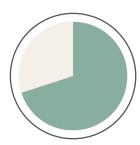
**CLASS GRADE** 

Ages 15-18

**TARGET STUDENTS** 

Overweight Teenagers

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



70% with household incomes <\$40,000



92% White 8% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENT: None reported

**BEST PRACTICES USED:** Active learning,

family engagement

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Not reported

DURATION: 9 weeks: 2 days/week for 6 weeks,

1 day/week for 3 weeks, 1-1.5 hours/day

**IMPLEMENTATION SUPPORT:** Provider training

#### STUDY DESCRIPTION

This study estimates the impact of COPE TEEN for students ages 15-18 with BMI of at least 25. Students were randomly assigned to participate in the program or to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in two high schools in upstate New York. The implementation year is not reported.

#### PHYSICAL ACTIVITY/HEALTH

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Body mass index	§	§	Ages 15-18	11	0.79 (0.63)
Weight	§	§	Ages 15-18	11	0.55 (0.62)
	Average ef	fect size for <i>Physical Act</i>	ivity/Health outcor	mes at Tiers I-III	0.67

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**STEM Programs** 

### 4-H Robotics Program

#### **PROGRAM DESCRIPTION**

The 4-H Robotics Program, offered in a small rural elementary school in Nebraska in 2005, aimed to increase the science, engineering, and technology achievement of rural youth ages 9-11. The program was staffed by certified teachers and used the National 4-H robotics curriculum, which was based on the LEGO Mindstorms curriculum. Using experiential learning, the program began with basic programming and building tasks and advanced to more complex projects. The program was offered for six weeks, two days per week, one hour each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



Science Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

### Location

LOCALE



Rural



Midwest

#### **Participants**

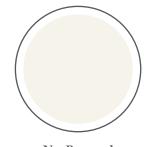
**CLASS GRADE** 

**TARGET STUDENTS** 

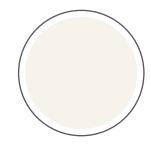
Ages 9-11

Low-Income

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

**BEST PRACTICES USED:** Sequenced, active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: 6 weeks, 2 days/week, 1 hour/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool robotics program in a small rural elementary school in Nebraska during 2005. The comparison group is comprised of students from the school who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **SCIENCE ACHIEVEMENT**

Outcome	ESSA evid	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
Evaluator-created assessment of science, engineering, and technology knowledge (general and domain-specific)	Tier II	Tier III	Ages 9-11	32	0.98 (0.38)*
	0.98				

<sup>\*</sup> Statistically significant at p<.05

### Bringing Up Girls in Science (BUGS)

#### **PROGRAM DESCRIPTION**

Bringing Up Girls in Science (BUGS), offered in a Texas community in 2001-02, aimed to increase the science achievement of fourth and fifth grade girls through environmental science experiences and female mentoring. The program used the Science, Technology, and Children Curriculum, which provides materials and resources for hands-on science experiments. Students were also paired with a high school mentor with whom they communicated regularly. The program was led by university faculty and staff and involved regular campus visits. The program was offered for the full school year, one day per week, two hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

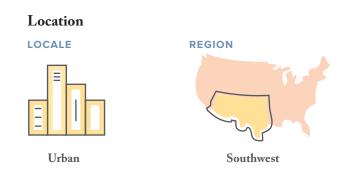
The study found at least one improved outcome with no overriding contrary evidence for



Science Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS



#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 4-5

Girls

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY





Not Reported

Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

BEST PRACTICES USED: Sequenced, active learning,

positive adult-student relationships

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group and one-to-one formats

STAFFING: Program staff, specialized staffing

DURATION: Full school year, 1 day/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

The study uses a quasi-experimental design to estimate the impact of this afterschool environmental science program. Outcomes for participating fourth and fifth grade girls from a mid-sized urban community in northern Texas are compared with outcomes from a matched group of girls from another large school district in northern Texas. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 2001-02.

#### **SCIENCE ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
lowa Test of Basic Skills in Science (ITBS-S)	Tier II	Tier III	Grade 4-5	66	0.65 (0.25)*	
	Average effect size for <i>Science Achievement</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

### The Investigators Club

#### **PROGRAM DESCRIPTION**

The Investigators Club, offered at one middle school in the Northeast, aimed to increase the academic motivation of low-income urban seventh graders through scientific exploration. The program, which was staffed by certified teachers and used The Investigators Club curriculum, engaged participants in solving scientific problems presented by the program leader. Students experienced hands-on activities, experimentation, small-group discussion, and communitybuilding activities. The program was offered for 15 weeks, three days per week, 1.5 hours each day. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

School Engagement

Science Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

REGION



Northeast

#### **Participants**

**CLASS GRADE** 

Grade 7

**TARGET STUDENTS** 

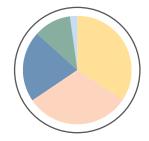
Low-Income

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



62% Low-Income



34% White 11% Asian 31% Latino

21% Black

2% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

**BEST PRACTICES USED:** Sequenced, active learning

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

DURATION: 15 weeks, 3 days/week, 1.5 hours/day

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of The Investigators Club for seventh grade students in one middle school. Pairs of interested students were matched on demographics and science grades, and one student within each pair was randomly selected to participate in the program. Outcomes for students who were randomized to participate in the program were compared to outcomes for students who were randomized to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

#### **SCHOOL ENGAGEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Teacher report of student engagement in science (Connell & Wellborn, 1991)	Tier I	Tier III	Grade 7	54	0.58 (0.28)*
	Average	e effect size for School E	ngagement outco	nes at Tiers I-III	0.58

<sup>\*</sup> Statistically significant at p<.05

#### **SCIENCE ACHIEVEMENT**

	ESSA evid			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Science course grade	Tier I	Tier III	Grade 7	54	0.97 (0.29)*	
Average effect size for <i>Science Achievement</i> outcomes at Tiers I-III						

<sup>\*</sup> Statistically significant at p<.05

### **FIRST Robotics**

### PROGRAM DESCRIPTION

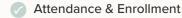
FIRST Robotics was a robotics competition for high school students designed to develop student interest in science, technology, engineering, and mathematics. The competition gave high school robotics teams a six-week period to design and program a robot to complete a specific task.

Following the six-week period, FIRST Robotics hosted a regional event.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

Overall, the studies found at least one improved outcome with no overriding contrary evidence for



#### No Effect

Overall, the studies found neither improved nor negative outcomes for

- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement
- School Engagement

This review of FIRST Robotics identified two studies of this program. The findings from each of these studies are presented individually on pages 347 – 351 of this document.

- Koumoullos, M. (2013). The academic differences between students involved in school-based robotics programs and students not involved in school-based robotics programs (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3573701)
- Welch, A., & Huffman, D. (2011). The effect of robotics competitions on high school students' attitudes toward science. *School Science and Mathematics*, 111(8), 416-424.

### FIRST Robotics (Career & technical school)

#### **PROGRAM DESCRIPTION**

This FIRST Robotics program, offered at a career and technical school in the Northeast in 2011-12, was a robotics competition for high school students designed to develop student interest in science, technology, engineering, and mathematics. The competition gave high school robotics teams a six-week period to design and program a robot to complete a specific task. Following the six-week period, FIRST hosted a regional event.

#### EFFECTIVENESS AT A GLANCE

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



#### No Effect

The study found neither improved nor negative outcomes for

- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement

**NOT MEASURED FOR THIS INTERVENTION:** Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban

# REGION

Northeast

#### **Participants**

**CLASS GRADE** 

TARGET STUDENTS

Grades 9-12

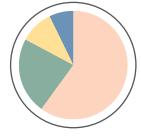
**General Population** 

#### **SOCIO-ECONOMIC STATUS**

**RACE OR ETHNICITY** 



77% Low-Income



60% Latino 23% Asian

10% White 7% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

**BEST PRACTICES USED:** Active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION:** 6 weeks

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of an afterschool robotics program in a large, urban career and technical education high school during 2011-12. The comparison group was comprised of students at the school who did not participate in the program. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **ATTENDANCE & ENROLLMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Percentage of school days attended - January 2012 report card	∞	∞	Grades 9-12	69	0.19 (0.25)	
Percentage of school days attended - June 2012 report card	Tier III	Tier III	Grades 9-12	65	0.62 (0.26) *	
	Average effect size for <i>Attendance &amp; Enrollment</i> outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **GENERAL ACHIEVEMENT**

Average effect size for	ESSA evidence tier			Number of	Effect size
General Achievement outcomes at Tiers I-III	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
GPA - January 2012 report card	§	§	Grades 9-12	69	0.17 (0.25)
GPA - June 2012 report card	§	§	Grades 9-12	65	0.00 (0.25)
Average effect size for General Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Mathematics course grade - June 2012 report card	§	§	Grades 9-12	65	-0.24 (0.25)	
Mathematics course grade - January 2012 report card	§	§	Grades 9-12	69	-0.14 (0.25)	
State assessment - mathematics	§	§	Grades 9-12	60	0.12 (0.27)	
	Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
English course grade - June 2012 report card	§	§	Grades 9-12	65	-0.35 (0.26)	
English course grade - January 2012 report card	§	§	Grades 9-12	69	-0.17 (0.25)	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### FIRST Robotics (Nine Schools)

#### **PROGRAM DESCRIPTION**

This FIRST Robotics program, offered in nine high schools in a Midwestern metropolitan area, was a robotics competition for high school students designed to develop student interest in science, technology, engineering, and mathematics. The competition gave high school robotics teams a six-week period to design and program a robot to complete a specific task. Following the six-week period, FIRST hosted a regional event. The implementation year is not reported.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for



School Engagement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Reading/ELA Achievement, Attendance & Enrollment, Science Achievement, and Social & **Emotional Competencies** 

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban, Urban

REGION



Midwest

#### **Participants**

**CLASS GRADE** 

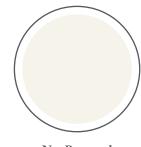
**General Population** 

**TARGET STUDENTS** 

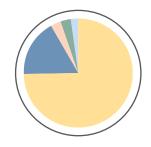
#### **SOCIO-ECONOMIC STATUS**

Grades 9-12

RACE OR ETHNICITY



Not Reported



74% White 17% Black

3% Asian 2% Other

3% Latino

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

**BEST PRACTICES USED:** Active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers, volunteers

**DURATION:** 6 weeks

**IMPLEMENTATION SUPPORT:** Program manual

#### STUDY DESCRIPTION

This quasi-experiment estimates impact of an afterschool robotics competition for students in nine high schools in a large Midwest-ern metropolitan area. Comparison group students, who did not participate in the program, attended the same schools and science classes as the students on the robotics team. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The implementation year is not reported.

#### **ATTENDANCE & ENROLLMENT**

Outcome	ESSA evid	dence tier		Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Test of Science Related Attitudes (TOSRA) - Leisure interest in science	§	§	Grades 9-12	99	0.36 (0.21)
Test of Science Related Attitudes (TOSRA) - Adoption of scientific attitudes	§	§	Grades 9-12	99	0.34 (0.21)
Test of Science Related Attitudes (TOSRA) - Attitude to scientific inquiry	§	§	Grades 9-12	99	0.33 (0.21)
Test of Science Related Attitudes (TOSRA) - Career interest in science	§	§	Grades 9-12	99	0.33 (0.21)
Test of Science Related Attitudes (TOSRA) - Enjoyment of science lessons	§	§	Grades 9-12	99	0.35 (0.21)
Average effect size for School Engagement outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### FIRST Lego League

#### **PROGRAM DESCRIPTION**

The FIRST Lego League (FLL), offered in one charter school in 2013, was an afterschool robotics program that aimed to develop student interest in engineering and math and improve math skills. Working in teams, students in grades 4-6 designed, created, and programmed a robot to solve a set of problems using the LEGO Mindstorms Invention set. Teacher coaches supported team-building through activities and resources provided by FLL.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

### Location

LOCALE



Not Reported



West

#### **Participants**

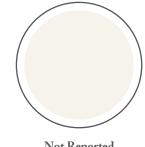
**CLASS GRADE** 

Grades 4-5

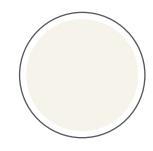
**TARGET STUDENTS** 

Gifted/Talented Students

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Not Reported



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

**BEST PRACTICES USED:** Active learning

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** Program manual,

ongoing support

#### STUDY DESCRIPTION

This study uses a quasi-experimental design to estimate the impacts of an afterschool robotics program on mathematics achievement among elementary school students attending a charter school in 2013. The study compares outcomes for fourth and fifth grade students who participated in the program to outcomes for a matched group of non-participants. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Renaissance Star Math	00	∞	Grade 5	46	-0.26 (0.30)
Renaissance Star Math	00	œ	Grade 4	46	-0.18 (0.30)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>∞</sup> Meets Tier II standards for research quality. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

### Leonardo's Laboratory

#### **PROGRAM DESCRIPTION**

Leonardo's Laboratory, offered in one elementary school in New Jersey during 2006-07, aimed to improve the overall classroom behavior and performance of urban students in grades 3-5 who were gifted in the area of visual spatial skills but were diagnosed with a learning disability. The program engaged students in a series of eight engineering projects based on Leonardo DaVinci's designs. The projects required planning, time management, follow-through, and exploration. The program was offered for eight weeks, one day per week, two hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Social & Emotional Competencies

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Reading/ELA Achievement, Attendance & Enrollment, School Engagement, and Science Achievement

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Suburban



Northeast

#### **Participants**

**CLASS GRADE** 

Grades 3-5

**TARGET STUDENTS** 

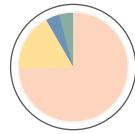
Gifted, With Learning Disability

#### **SOCIO-ECONOMIC STATUS**

RACE OR ETHNICITY



Not Reported



73% Latino 4% Asian 17% White 4% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

**BEST PRACTICES USED:** Sequenced, respect for

student cultures

### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Specialized staffing

DURATION: 8 weeks, 1 day/week, 2 hours/day

**IMPLEMENTATION SUPPORT:** Program manual,

provider training

#### STUDY DESCRIPTION

This randomized controlled trial estimates the impact of Leonardo's Laboratory for students in grades 3-5 who had above average visual-spatial skills as measured by the Culture Fair Intelligence Test and were identified by their teachers as struggling with the traditional curriculum. Outcomes for students who were randomized to the program are compared to outcomes for students randomized to the comparison group. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted at one elementary school in Passaic, New Jersey during 2006-07.

#### **SOCIAL & EMOTIONAL COMPETENCIES**

Outcome	ESSA evid	dence tier		Number of students	Effect size (Standard error)
	Without site and sample criteria	With site and sample criteria	Group		
Teacher Rating Scale of the Behavior Assessment System for Children (BASC-2) - Attention Problems scale	<b>◊</b>	<b>◊</b>	Grades 3-5	23	-0.13 (0.42)
Teacher Rating Scale of the Behavior Assessment System for Children (BASC-2) - Leadership Scale	$\Diamond$	<b>◊</b>	Grades 3-5	23	0.03 (0.42)
Teacher Rating Scale of the Behavior Assessment System for Children (BASC-2) - Social Skills scale	<b>◊</b>	<b>◊</b>	Grades 3-5	23	-0.15 (0.42)
Average effect size for Social & Emotional Competencies outcomes at Tiers I-III					

<sup>♦</sup> Meets Tier I standards for cause-and-effect. Does not meet Tier I because there is not a statistically significant improvement in the outcome.

# STEM Excellence and Leadership

#### **PROGRAM DESCRIPTION**

The STEM Excellence and Leadership program, offered in 11 rural districts in lowa, aimed to prepare academically successful, rural, low-income students in grades 6-8 for advanced high school coursework in STEM. The program offered additional math and science course work and provided professional development for teachers in the areas of math, science, and gifted education. The program was offered for 24 weeks, with an average participation of 96 hours.

### STUDY LOCATION AND PARTICIPANTS

### Location

LOCALE



Rural



Midwest

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found neither improved nor negative outcomes for

Mathematics Achievement

Science Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion and Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

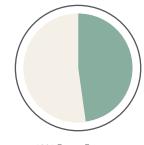
TARGET STUDENTS

Grades 6-8

**High-Performing** 

#### SOCIO-ECONOMIC STATUS

RACE OR ETHNICITY



48% Low-Income



Not Reported

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: STEM activities** 

**BEST PRACTICES USED:** None reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Not reported

**STAFFING:** Certified teachers

**DURATION: 24** weeks, average participation=96 hours

**IMPLEMENTATION SUPPORT:** Provider training

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of the STEM Excellence and Leadership program for high-achieving students in grades 6-8. Outcomes for program participants are compared to outcomes for students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted in 11 schools in 11 rural districts in lowa.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
ACT Explore - math	§	§	Grades 6-8	123	0.28 (0.18)
Average effect size for <i>Mathematics Achievement</i> outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SCIENCE ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
ACT Explore - science	§	§	Grades 6-8	123	0.00 (0.18)
Average effect size for <i>Science Achievement</i> outcomes at Tiers I-III					

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**Sports Programs** 

### **School-Sponsored Sports (Texas)**

The program consisted of participation in school-sponsored sports in three districts in Texas. The implementation year is not reported.

#### Location

LOCALE



Urban



#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for



School Engagement

#### No Effect

The study found neither improved nor negative outcomes for



Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Mathematics Achievement, Other Achievement, Physical Activity/ Health, Promotion & Graduation, Attendance & Enrollment, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

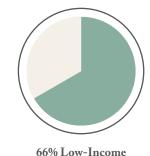
**TARGET STUDENTS** 

Grade 8

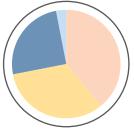
**General Population** 

#### **SOCIO-ECONOMIC STATUS**

RACE OR ETHNICITY







25% Black 3% Other

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff **DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of having participated in school-sponsored sports and performing arts in eighth grade on academic achievement and school engagement in ninth grade. The study examines these outcomes for students in three school districts in Texas. The implementation year is not reported.

#### **READING/ELA ACHIEVEMENT**

	ESSA evid	dence tier	Number o		Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Language arts course grade	§	§	Grade 8	495	-0.04 (0.09)	
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III						

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **SCHOOL ENGAGEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Motivation for Education Attainment Questionnaire: Value of Education subscale	Tier III	Tier III	Grade 8	495	0.42 (0.09)*
Teacher rating of classroom engagement	§	§	Grade 8	495	-0.04 (0.09)
Average effect size for School Engagement outcomes at Tiers I-III					0.23

<sup>\*</sup> Statistically significant at p<.05

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

## **High School Interscholastic Sports**

#### PROGRAM DESCRIPTION

This quasi-experiment uses data from the National Educational Longitudinal Study (NELS) to estimate the impact of participating in high school interscholastic sports on student achievement. Outcomes for students who reported participating in sports in both tenth and twelfth grades were compared to outcomes for students who did not participate in sports in either year.

#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Rural, Suburban, Urban



All Regions

#### **Participants**

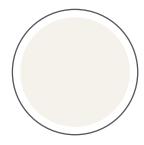
**CLASS GRADE** 

Grades 10-12

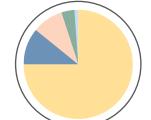
**TARGET STUDENTS** 

**General Population** 

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY



Average family income = \$42,400



75% White 11% Black 9% Latino 4% Asian 1% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Not reported

STAFFING: Not reported

DURATION: Not reported

**IMPLEMENTATION SUPPORT:** None reported

## Study Details

#### STUDY DESCRIPTION

This quasi-experiment uses data from the National Educational Longitudinal Study (NELS) to estimate the impact of participating in high school interscholastic sports on student achievement. Outcomes for students who reported participating in sports in both tenth and twelfth grades were compared to outcomes for students who did not participate in sports in either year.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Math achievement test - National Educational Longitudinal Study	Tier III	Tier III	Grades 10-12	Not Reported	Cannot determine*	
Mathematics course grade	Tier III	Tier III	Grades 10-12	Not Reported	Cannot determine*	
	Average effect size for Mathematics Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evid  Without site and  sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)	
English course grade	Tier III	Tier III	Grades 10-12	Not Reported	Cannot determine*	
Reading achievement test - National Educational Longitudinal Study	Tier III	Tier III	Grades 10-12	Not Reported	Cannot determine*	
	Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

## School-Sponsored Sports (Miami)

#### PROGRAM DESCRIPTION

School-sponsored varsity athletics programs served male and female high school students in Florida in 2002-03. Activities included any sport recognized by the Florida High School Athletics Association.

#### EFFECTIVENESS AT A GLANCE

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: General Achievement, Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, School Engagement, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Southeast

#### **Participants**

**CLASS GRADE** 

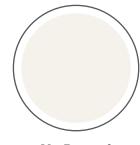
Grades 9-12

**TARGET STUDENTS** 

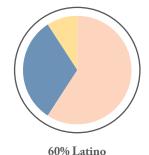
**General Population** 

#### SOCIO-ECONOMIC STATUS RACE

**RACE OR ETHNICITY** 



Not Reported



32% Black 9% White

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Not reported

**DELIVERY FORMAT:** Group format

STAFFING: Program staff

**DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

## Study Details

#### STUDY DESCRIPTION

For this quasi-experiment, conducted in the Miami-Dade County Public Schools, 10 senior high schools were randomly selected from 31 comprehensive senior high schools during the 2002-03 school year. From each school, about 100 students participating in school sports and 100 non-participants were randomly selected, and their attendance and achievement were compared. Sports participants were varsity athletes selected from each school's Florida High School Athletic Association (FHSAA) athletic eligibility list.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evid	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Florida Comprehensive Assessment Test - mathematics	Tier III	Tier III	Grades 9-12	2,081	0.15 (0.04)*
	Average effect	t size for <i>Mathematics Ad</i>	chievement outcor	mes at Tiers I-III	0.15

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Florida Comprehensive Assessment Test - reading	Tier III	Tier III	Grades 9-12	2,081	0.11 (0.04)*
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	mes at Tiers I-III	0.11

<sup>\*</sup> Statistically significant at p<.05

## **School-Sponsored Sports (South Texas)**

The program consisted of extracurricular sports activities at the high school level for Latina girls in one urban district in Texas. The implementation year is not reported.

### Location

LOCALE





#### **EFFECTIVENESS AT A GLANCE**

#### **Positive Effect**

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement

NOT MEASURED FOR THIS INTERVENTION: Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

#### **Participants**

**CLASS GRADE** 

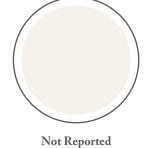
**TARGET STUDENTS** 

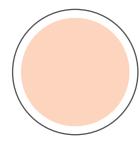
Grade 11

Latina Girls

#### SOCIO-ECONOMIC STATUS RACE OR ETHNICITY







100% Latina

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Not reported

**DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

## Study Details

#### STUDY DESCRIPTION

This quasi-experimental study examined the effects of participation in school-sponsored sports for Latina eleventh grade girls in an urban district in South Texas. The comparison group was comprised of girls who did not participate in sports. The implementation year is not reported.

#### ATTENDANCE & ENROLLMENT

	ESSA evid	ESSA evidence tier		Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
Number of school days attended	Tier III	Tier III	Grade 11	788	0.29 (0.08) *	
	Average effe	Average effect size for Attendance & Enrollment outcomes at Tiers I-III				

<sup>\*</sup> Statistically significant at p<.05

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size	
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)	
GPA	Tier III	Tier III	Grade 11	788	0.19 (0.08) *	
	Average effect size for General Achievement outcomes at Tiers I-III					

<sup>\*</sup> Statistically significant at p<.05

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Texas Assessment of Knowledge and Skills - mathematics	Tier III	Tier III	Grade 11	788	0.51 (0.08) *
	Average effect	t size for <i>Mathematics Ad</i>	chievement outcor	mes at Tiers I-III	0.51

<sup>\*</sup> Statistically significant at p<.05

#### **READING/ELA ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Texas Assessment of Knowledge and Skills - reading	Tier III	Tier III	Grade 11	788	0.38 (0.08) *
	Average effect	t size for <i>Reading/ELA A</i>	chievement outcor	mes at Tiers I-III	0.38

<sup>\*</sup> Statistically significant at p<.05

## **SquashSmarts**

#### PROGRAM DESCRIPTION

SquashSmarts, offered at two middle schools in Philadelphia, Pennsylvania in 2008-09, was a sports-based youth development program that aimed to promote health and fitness, academic success, and service by engaging urban sixth graders in the game of squash. The program provided squash instruction and competitive opportunities coupled with homework help and individual mentoring. Participants were also required to participate in community service activities. The program was offered for the full school year, three days per week, three hours each day.

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found at least one improved outcome with no overriding contrary evidence for

- School Engagement
- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement

**NOT MEASURED FOR THIS INTERVENTION:** Other Achievement, Physical Activity/Health, Promotion & Graduation, Attendance & Enrollment, Science Achievement, and Social & Emotional Competencies

#### STUDY LOCATION AND PARTICIPANTS

### Location

LOCALE



Urban

REGION



Northeast

#### **Participants**

**CLASS GRADE** 

**TARGET STUDENTS** 

Grades 6-7

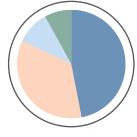
**General Population** 

#### SOCIO-ECONOMIC STATUS

**RACE OR ETHNICITY** 



Not Reported



47% Black 8% Asian 35% Latino 10% Other

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

MAIN COMPONENTS: Sports, homework help

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** Community site

**DELIVERY FORMAT:** Group format

**STAFFING:** Program staff

**DURATION:** Full school year, 3 days/week, 3 hours/day

**IMPLEMENTATION SUPPORT:** None reported

## Study Details

#### STUDY DESCRIPTION

This quasi-experiment compared academic outcomes for students who participated in the SquashSmarts programs to outcomes for a matched group of comparison students who did not participate. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities. The study was conducted during 2008-09 at two middle schools in Philadelphia, Pennsylvania.

#### **GENERAL ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
GPA	§	§	Grades 6-7	61	0.13 (0.26)
Wechsler Individual Achievement Test - version 2 - total	œ	œ	Grades 6-7	73	-0.42 (0.24)
	Average 6	effect size for General A	chievement outcor	mes at Tiers I-III	-0.15

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

	ESSA evidence tier			Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Wechsler Individual Achievement Test - version 2 - mathematics	∞	∞	Grades 6-7	73	-0.03 (0.23)
	Average effect	t size for Mathematics Ad	chievement outcor	nes at Tiers I-III	-0.03

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

	ESSA evid	dence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Wechsler Individual Achievement Test - version 2 - reading	∞	œ	Grades 6-7	73	-0.15 (0.23)
Wechsler Individual Achievement Test - version 2 - written language	œ	∞	Grades 6-7	73	-0.38 (0.24)
Wechsler Individual Achievement Test - version 2 - written language	œ	∞	Grades 6-7	73	-0.36 (0.24)
	Average effect	size for Reading/ELA A	chievement outcor	mes at Tiers I-III	-0.30

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **SCHOOL ENGAGEMENT**

	ESSA evi	ESSA evidence tier		Number of	Effect size
Outcome	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
School Success Profile - School Engagement and Trouble Avoidance Dimensions - behavioral	∞	∞	Grades 6-7	67	0.04 (0.24)
School Success Profile - School Engagement and Trouble Avoidance Dimensions - psychological	§	§	Grades 6-7	67	0.05 (0.24)
	Average	e effect size for <i>School E</i>	ngagement outcor	mes at Tiers I-III	0.05

 $<sup>\</sup>infty$  Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

 $<sup>\</sup>S$  Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

### School-Sponsored Sports (Career & Technical School)

#### PROGRAM DESCRIPTION

The program was school-sponsored sports participation in a large, urban, career and technical education high school during 2011-12.

#### STUDY LOCATION AND PARTICIPANTS

#### Location

LOCALE



Urban



Northeast

#### **EFFECTIVENESS AT A GLANCE**

#### No Effect

The study found at least one improved outcome with no overriding contrary evidence for

- Attendance & Enrollment
- General Achievement
- Mathematics Achievement
- Reading/ELA Achievement

**NOT MEASURED FOR THIS INTERVENTION:** Other Achievement, Physical Activity/Health, Promotion & Graduation, School Engagement, Science Achievement, and Social & Emotional Competencies

### **Participants**

**CLASS GRADE** 

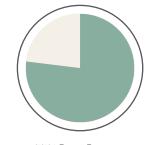
TARGET STUDENTS

Grades 9-12

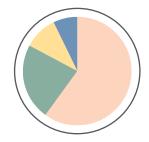
**General Population** 

#### SOCIO-ECONOMIC STATUS R

RACE OR ETHNICITY



77% Low-Income



60% Latino 10% White 23% Asian 7% Black

#### PROGRAM FEATURES AS IMPLEMENTED IN THIS STUDY

#### **Program Content**

**MAIN COMPONENT: Sports** 

**BEST PRACTICES USED:** Not reported

#### Logistics

**SETTING:** School site

**DELIVERY FORMAT:** Group format

**STAFFING:** Certified teachers

**DURATION:** Not reported

**IMPLEMENTATION SUPPORT:** None reported

## Study Details

#### STUDY DESCRIPTION

This quasi-experiment estimates the impact of afterschool sports participation in a large, urban career and technical education high school during 2011-12. The comparison group was comprised of students at the school who did not participate in sports. The comparison students experienced "business as usual," which could have included other school- and community-sponsored afterschool activities.

#### **ATTENDANCE & ENROLLMENT**

Outcome	ESSA evidence tier		Croup	Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Percentage of school days attended - January 2012 report card	∞	œ	Grades 9-12	74	0.11 (0.23)
Percentage of school days attended - June 2012 report card	§	§	Grades 9-12	71	0.24 (0.24)
Average effect size for Attendance & Enrollment outcomes at Tiers I-III					0.17

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome. § Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **GENERAL ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
GPA - June 2012 report card	§	§	Grades 9-12	71	0.06 (0.24)
GPA - Janunary 2012 report card	00	∞	Grades 9-12	74	0.04 (0.23)
Average effect size for General Achievement outcomes at Tiers I-III					0.05

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome.

#### **MATHEMATICS ACHIEVEMENT**

Outcome	ESSA evidence tier			Number of	Effect size
	Without site and sample criteria	With site and sample criteria	Group	students	(Standard error)
Mathematics course grade - January 2012 report card	∞	∞	Grades 9-12	74	-0.27 (0.23)
Mathematics course grade - June 2012 report card	§	§	Grades 9-12	71	-0.26 (0.24)
State assessment - mathematics	§	§	Grades 9-12	68	-0.30 (0.24)
Average effect size for Mathematics Achievement outcomes at Tiers I-III					-0.28

<sup>∞</sup> Meets Tier II standards for cause-and-effect. Does not meet Tier II because there is not a statistically significant improvement in the outcome. § Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

#### **READING/ELA ACHIEVEMENT**

Outcome	ESSA evice  Without site and sample criteria	dence tier  With site and sample criteria	Group	Number of students	Effect size (Standard error)
	Sample Citteria	Sample Citteria			
English course grade - June 2012 report card	§	§	Grades 9-12	71	-0.04 (0.24)
English course grade - January 2012 report card	§	§	Grades 9-12	74	-0.12 (0.23)
Average effect size for Reading/ELA Achievement outcomes at Tiers I-III					-0.08

<sup>§</sup> Meets Tier III standards for cause-and-effect. Does not meet Tier III because there is not a statistically significant improvement in the outcome.

**CITATION:** Koumoullos, M. (2013). The academic differences between students involved in school-based robotics programs and students not involved in school-based robotics programs (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3573701)

# **APPENDIX EG-1**

STUDIES OF SCHOOL-SPONSORED EXTRACURRICULAR PROGRAMS

#### About studies of school-sponsored extracurricular programs

This appendix describes studies of the effects of participation in school-sponsored extracurricular programs on a range of outcomes. Importantly, these studies do not distinguish the effects of participation in different types of activities. Some studies meet Tier III, and others meet Tier IV. We present studies of extracurricular programs with a paragraph only—rather than a full program summary—because though they provide useful information about the effects of a set of afterschool activities, they are not studies of a specific program model with defined components.

#### STUDIES OF EXTRACURRICULAR ACTIVITIES THAT MEET CAUSE-AND-EFFECT REQUIREMENTS FOR TIER III

#### **Extracurricular activities (California)**

The quasi-experimental study estimates the effects on high school students' attitudes toward school and academic aspirations of participation in extracurricular activities or other afterschool programs. The study found that students who participated in at least one extracurricular activity had higher academic aspirations and more positive attitudes toward school than students who did not participate in any extracurricular activities. The study was conducted in six California high schools in 1987-88 and 1989-90.

Darling, N., Caldwell, L. L., & Smith, R. (2005). Participation in school-based extracurricular activities and adolescent adjustment. *Journal of Leisure Research*, *37*(1), 51-76.

#### **Extracurricular activities (Chicago)**

The quasi-experimental study estimates the effects on behavior, verbal ability, and reading ability of participation in extracurricular activities or other afterschool programs, using data at two time points from the Project on Human Development in Chicago Neighborhoods survey. At the first time point, when students were 9, 12, or 15 years old, their caregivers were asked whether they participated in at least one afterschool activity; students whose caregivers answered affirmatively are characterized as "participants," and others formed the comparison group. At the second time point, three years later, student outcomes were assessed. The study found a statistically significant improvement in verbal ability as measured by the Wechsler Intelligence Scale for Children-Revised and no effect on behavior or reading ability. The study was conducted in Chicago in 1995 and 1998.

Isbell, A. M. (2014). *Analysis of the relationships between after-school programs/activities and competencies* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3367008)

#### **Extracurricular activities (Indiana)**

The quasi-experimental study estimates the effects on English language arts and mathematics achievement and school attendance of participation in school-based extracurricular activities. The study found statistically significant improvements in English language arts and mathematics scores and no differences in attendance. The study was conducted in six rural Indiana high schools in 2010-11.

Wilcox, M. L. (2012). The impact of extracurricular activities on academic performance for rural secondary students in Indiana (Doctoral dissertation). Retrieved from http://scholars.indstate.edu/handle/10484/4006

#### **Extracurricular activities (Texas)**

This quasi-experimental study estimates the effects on attitudes toward education, ninth grade English language arts (ELA) course grade, and classroom engagement (as rated by teachers) of eighth graders' participation in extracurricular activities other than school-sponsored sports. Outcomes for students who participated are compared to outcomes for students who did not participate in these activities. The study found a statistically significant improvement in classroom engagement but no differences for attitudes toward education or ninth grade ELA course grade. The study was conducted in three Texas school districts in 2008.

Hughes, J. N., Cao, Q., & Kwok, O. M. (2016). Indirect effects of extracurricular participation on academic adjustment via perceived friends' prosocial norms. *Journal of Youth and Adolescence*, 45(11), 2260-2277.

#### STUDIES OF EXTRACURRICULAR ACTIVITIES THAT MEET CAUSE-AND-EFFECT REQUIREMENTS FOR ESSA TIER IV

#### **Extracurricular activities (Missouri)**

This study uses a quasi-experimental design to estimate the effects of school-based extracurricular activities on achievement and attendance among elementary school students. Using a sample of students in grades 3-5 in one school, the study compares outcomes for students who participated in school-based extracurriculars to outcomes for those who did not participate. This school offered the following extracurricular activities: drama club, choir, an ecology/environment activity, science club, chess club, "Girls on the Run," a blended running/physical activity and English/language arts activity, and a math competition group. Each of the activities met once per week for 60 minutes. The study was conducted in one Missouri school in 2011-12.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Israel, J. M. (2013). Student extracurricular participation, student achievement, and school perception: An elementary school perspective (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3561144)

#### **Extracurricular activities and sports (New Jersey)**

This quasi-experiment estimates the effects on GPA and SAT scores of participating in school sports and/or extracurricular activities. Outcomes for students who participated in at least one sport or activity were compared to outcomes for students who did not participate in any sports or activities. The study was conducted in one New Jersey high school in 2012-13.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Scarpello, J. P. (2014). *Examination of the relationship between academic and demographic variables at Hillsborough High School, NJ* (Doctoral dissertation). Retrieved from http://delaware.contentdm.oclc.org/cdm/compoundobject/collection/p15323coll5/id/26596/rec/1

#### **Extracurricular activities (Virginia)**

This quasi-experimental study assesses effects on reading and math achievement of participation in school-based extracurricular activities. Outcomes for students who participated in at least one activity were compared to outcomes for students who did not participate in any activities. The study was conducted in two Virginia middle schools in 2013-14.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Callender, S. L. (2015). Student participation in extracurricular activities and the impact on academic achievement, self-concept, and academic self-concept during the middle school years (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3663019)

#### Extracurricular activities and sports (Georgia)

This quasi-experiment estimates the effects on scores on the Georgia High School Graduation Test of participation in school sports, band, chorus, or drama for three cohorts of eleventh graders. Outcomes for students who participated in at least one activity were compared to outcomes for students who did not participate in any activities. The study was conducted in one Georgia high school in 2002-04. The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Moran, R. A. (2009). *Extracurricular activities: Investigating the effects of participation-nonparticipation on the Georgia high school graduation test* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3350419)

#### **Extracurricular activities and sports (Idaho)**

This quasi-experiment estimates the impact of participation in school sports and/or extracurricular activities on the academic achievement of twelfth graders. The comparison group did not participate in any sports or activities. The study was conducted in two rural schools in Idaho in 2001-02.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Miller, J. S. (2004). An examination of academic achievement and the development of personal attributes of students participating in extracurricular activities in two rural Idaho high schools (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3123843)

#### **Extracurricular activities and sports (NELS study)**

This quasi-experiment uses data from the National Educational Longitudinal Study (NELS) to estimate the impact on mathematics achievement of participation in school sports or extracurricular clubs for high school students. Outcomes for students who participated in these activities in twelfth grade are compared to outcomes for students who did not participate in any activities. The data are from 1988-92.

The study reports improved outcomes, but the eligible outcomes do not meet review requirements.

Lipscomb, S. (2007). Secondary school extracurricular involvement and academic achievement: A fixed effects approach. *Economics of Education Review, 26*(4), 463-472.

#### Extracurricular activities and sports (TIMSS study)

This quasi-experiment estimates the impact on math and science achievement of fourth graders' participation in afterschool sports or clubs. The data are from Trends in International Mathematics and Science Study (TIMSS) 2011.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Li, Y. (2016). *Three essays on economic evaluation of health intervention programs and health policy* (Doctoral dissertation). Retrieved from https://oaktrust.library.tamu.edu/handle/1969.1/158142

# **APPENDIX EG-2**

STUDIES THAT DO NOT MEET TIER III REQUIREMENTS (TIER IV)

#### About studies that do not meet Tier I-III requirements

This appendix describes studies that compare outcomes for program participants to outcomes for a comparison group of students but do not meet all of the Cause-and-Effect requirements for Tiers I-III. We refer to these as Tier IV studies. The most typical reason why these studies do not meet Tier III or above is that they do not include sufficient statistical controls for pre-existing differences between program and comparison groups. Studies lacking these statistical controls are not strong tests of program effectiveness, and we have low confidence that any observed differences are the result of the program.

In this appendix, we summarize each Tier IV study so that education decision-makers can have a complete accounting of all publicly available comparison group studies of afterschool programs. Evidence from studies with comparison groups is superior to that from studies that compare pre- and post-program outcomes for participants only. A Tier IV study with one or more positive effects may contribute to a well-specified, research-informed logic model for an afterschool program, as required by ESSA's Tier IV evidence provision. This approach would enable a school or district to implement the afterschool program while examining its impact with a more rigorous study that could meet Tier I-III requirements.

#### STUDIES OF ACADEMIC PROGRAMS

#### 21st Century Community Learning Centers program for ninth graders

This quasi-experiment estimates the impact on mathematics and English language arts achievement of an afterschool tutoring program for ninth graders who scored below basic on the eighth grade state standardized assessment or were recommended by a teacher as being in need of tutoring. Outcomes for students who attended tutoring at least two days per week are compared to outcomes for students who did not participate. The study was conducted in two South Carolina high schools during 2013-14. The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Scott, V. (2014). The impact of an after-school tutorial program on at-risk ninth grade students' academic performance in an Urban Midlands School District (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3662524)

#### 21st Century Community Learning Centers program (Louisville, Mississippi)

This quasi-experiment estimates the impact on academic achievement of an afterschool program at four schools in the Louisville Municipal School District in Mississippi. The program served students in grades 5-8. Programming consisted mainly of academic enrichment aimed at increasing vocabulary, reading fluency, comprehension, math fluency and problem-solving, and some college and career preparation activities. The program also provided courses to develop skills and build character. Outcomes for participants are compared to outcomes for nonparticipants. The study was conducted during 2010-13. The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Hailey, L. A. (2014). The effects of an after-school program: Changing academic performance and promoting success (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3618240)

#### Academic remediation program for students with disabilities

This quasi-experiment estimates the impact on academic achievement of an afterschool program for students with disabilities in one middle school in Georgia. The program provided intense content-area remediation and included differentiated instruction and direct instruction. Sessions were held for two hours twice per week, with instruction in mathematics during the first hour and instruction in reading during the second hour. Students were divided into small groups with one teacher assigned to every ten students. The study was conducted in 2007-08.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Roberts, G. A. (2008). Effect of an after-school remediation program on the academic achievement of students with disabilities (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3324724)

#### Academically-focused program for high school students (South Carolina)

This quasi-experiment estimates the impact on academic achievement of an academically-focused afterschool program for second year high school students from Spartanburg County, South Carolina who scored at or below the 50th percentile on the South Carolina High School Assessment Program test. The program offered 12 tutoring sessions in English language arts and 12 in mathematics, each lasting 30 minutes. Students participated in either the English afterschool program, the mathematics afterschool program, or both based on previous test scores. The curriculum was organized into daily lessons, each stressing one skill. The study was conducted in 2011-12.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Fulmer, A. D. (2013). *Investigating relationships between academic achievement and after school programs in a high school environment* (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=3378&context=etd

#### Afterschool Literacy Program with the Barton Reading & Spelling System®

This quasi-experiment estimates the impact on reading comprehension of an afterschool program using the Barton Reading & Spelling System®. The program, which used one-to-one tutoring, was offered to students in grades 1-6 who were identified as having reading difficulties. The program was held twice a week during the fall and spring semesters for one-hour sessions. Outcomes for students who participated in this intervention are compared to outcomes for students who did not participate. The program was offered in one school system in Arkansas during 2008-09.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Gearhart, S. (2016). Reading comprehension through incidental learning: Efficacy of an after-school literacy program utilizing the Barton Reading and Spelling System® (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 10240947)

#### **Afterschool math program (Tennessee)**

This quasi-experiment estimates the impact on math achievement of an afterschool mathematics program for students in grades 6-8. The program targeted students whose math scores were basic or below basic on the state assessment. The study does not provide detail about the content of the program. The study was conducted in two middle schools in Tennessee during 2012-13.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups. Eligible outcomes do not meet review requirements, and the measures of effectiveness cannot be attributed to the intervention.

Jarratt, K. (2014). *Mathematics achievement outcomes for middle school students attending school-based afterschool mathematics programs* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3582791)

#### **Complementary Assistance Learning Program**

This quasi-experiment estimates the effects of the Complementary Assistance Learning Program (CALP) on reading achievement. CALP was an afterschool reading remediation program targeted to eighth graders who had a low score on the state seventh grade reading assessment. The study was conducted during 2006-07 at one suburban middle school in southeast Georgia.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Sanford, E. E. (2010). Examining the impact of complementary assistance learning on student CRCT scores (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3397116)

#### **Gevirtz Homework Project**

This quasi-experiment estimates the impact on effort in reading and math, study skills, and social skills of an afterschool homework help program. The program was offered to students in grades 4-6 in three elementary schools in one school district in Southern California. The program served students with a range of academic achievement. Sessions were held either three or four days per week for 50 minutes. A credentialed teacher supervised the sessions, with the help of an assistant; either one or both teachers was bilingual. The implementation year is not reported.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Cosden, M., Morrison, G., Albanese, A. L., & Macias, S. (2001). When homework is not home work: After-school programs for homework assistance. *Educational Psychologist*, *36*(3), 211-221.

#### **Knowledge Points**

This quasi-experiment estimates the impact of afterschool tutoring for students in grades 5-8 offered by Knowledge Points, a private tutoring company. Reading, mathematics, and science achievement of students receiving the tutoring are compared to outcomes for students from a different school who did not receive tutoring. The study was conducted in Nashville, Tennessee during 2008-09 and 2009-10.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Sebastian, J. (2013). The impact of an after-school intervention program on academic achievement among middle school students (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3587666)

#### **Math instruction with Classroom Performance System**

This randomized controlled trial estimates the impact of afterschool mathematics instruction using the Classroom Performance System (CPS), in which students use handheld "clickers" to respond to teacher questions. The instruction was offered to eighth grade boys for six weeks. Outcomes for program participants are compared to outcomes for a control group, who received direct instruction in math and solved problems using pencil and paper. The study was conducted in a school in Georgia. The implementation year is not reported.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups and the measures of effectiveness cannot be attributed to the intervention.

Smart, V. J. (2016). *Improving student achievement in after school programs through technology: An action research study* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 10144298)

#### **Pathways to Success**

This quasi-experiment estimates the impact on mathematics and English language arts achievement of an afterschool tutoring program for students in grades 2-6 in one elementary school in New Jersey. Outcomes for program participants are compared to outcomes for students who did not participate. The study was conducted in 2003-04.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Smith, T. A. (2005). An examination of the effectiveness of a specific after-school academic intervention program on the success of at risk students (Doctoral dissertation). Retrieved from https://scholarship.shu.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1203&context=dissertations

#### **Project Excel**

This quasi-experiment estimates the impact of Project Excel, an afterschool program that provided math remediation for students in grades 2-5 in one school district in New Jersey. The program was fully funded by Title I and employed 15 teachers in two buildings. The program was offered once a week for 60 minutes, with 45 minutes of instruction and 15 minutes of performance-based assessment. Outcomes for participants (who were eligible due to low-income status and test scores) were compared to outcomes for eligible nonparticipants. The study was conducted during 2004-05.

The study reports negative effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Lovell, C. (2006). The relationship between participation in extended-day programs and mathematics achievement of Title-I eligible participants (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3226843)

#### **SmartLinks**

This quasi-experiment estimates the impact on academic achievement and attendance of SmartLinks, an afterschool program for eighth graders in Alabama funded by the 21st Century Community Learning Centers program. The program includes remediation, academic enrichment activities, and recreation. Outcomes for participants are compared to outcomes for nonparticipants. The study was conducted at one school in 2003-04.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Pettway, D. D. (2005). *An evaluation of SmartLinks* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3173506)

#### **Young Reader's Program**

This quasi-experiment estimates the effects on reading achievement of Young Reader's Program, an afterschool reading intervention offered to students reading well below grade level in grades 1-3 in Kansas City, Missouri. This study focused on second grade participants in one school in 2001. The program met for three hours once per week for 28 weeks, in groups of between 20 to 25 students. The program used differentiated instruction to teach reading, writing, vocabulary, spelling, listening, and comprehension skills through a combination of skills instruction, high-quality children's literature, storytelling, singing, drawing, movement, and manipulative-based instruction. Outcomes for program participants are compared to outcomes for students who did not participate.

The study reports improved outcomes, but the measures of effectiveness cannot be attributed to the intervention.

Boulden, W. T. (2006). Evaluation of the Kansas City LULAC National Education Service Center's Young Reader's Program. *Children & Schools*, 28(2), 107-114.

#### STUDIES OF ACADEMIC PLUS SOCIAL SUPPORTS PROGRAMS

#### **Best Foot Forward**

This study uses a randomized design to estimate the effects on attitudes toward school and social and emotional competencies of Best Foot Forward, an afterschool recreational program targeted to fifth grade African-American boys identified as aggressive. The program consisted of 32 lessons over 12 consecutive weeks. Half of the lessons focused on social skills, and half targeted academic motivation skills. The randomized design was compromised because some parents could specify whether their children were in the treatment or comparison condition. The implementation year is not reported.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Graham, S., Taylor, A., & Hudley, C. (2015). A motivational intervention for African American boys labeled as aggressive. *Urban Education*, 50(2), 194-224.

#### Village Model of Care (Study #1)

This study uses a randomized design to estimate the effects on academic achievement and school behavior of Village Model of Care, a program targeted to sixth grade African American youth. The program included three components: (1) structured group mentoring; (2) parental empowerment and support services; and (3) community outreach services. It was implemented with youth and their primary caregiver(s) over a school year, with afterschool programming four days per week, scheduled gatherings of students with their families, and field trips. The study was conducted with four cohorts of students in two schools. The two schools were randomized either to treatment or control. The implementation year is not reported.

The study reports improved outcomes, but the eligible outcomes do not meet review requirements and the measures of effectiveness cannot be attributed to the intervention.

Hanlon, T. E., Simon, B. D., O'Grady, K. E., Carswell, S. B., & Callaman, J. M. (2009). The effectiveness of an after-school program targeting urban African American youth. *Education and Urban Society, 42*(1), 96–118.

#### Village Model of Care (Study #2)

This quasi-experiment estimates the impact on school connectedness of Village Model of Care, an afterschool program for students aged 11-16 that offered academic assistance, group mentoring, parental support, and community outreach services. The study was conducted at two urban middle schools. Outcomes for program participants are compared to outcomes for students who did not participate. The implementation year is not reported.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Carswell, S. B., Hanlon, T. E., Watts, A. M. & O'Grady, K. E. (2014). Prevention-related research targeting African American alternative education program students. *Education and Urban Society, 46*(4) 434-449.

#### STUDIES OF ARTS PROGRAMS

#### Intensive music education program

This randomized controlled trial estimates the effects on reading and mathematics achievement of an intensive afterschool music education program for students in grades 1-8 inspired by El Sistema. The program was offered for two hours after school for 39 weeks. Each meeting featured 40 minutes of instruction on an orchestral instrument in a small-group setting and 40 minutes of rehearsal in an ensemble comprised of players of similar levels of experience and skill. The study was conducted in one parochial school during 2010–11, 2011–12, and 2012–13.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Holochwost, S. J., Propper, C. B., Wolf, D. P., Willoughby, M. T., Fisher, K. R., Kolacz, J., ... & Jaffee, S. R. (2017). Music education, academic achievement, and executive functions. *Psychology of Aesthetics, Creativity, and the Arts, 11*(2), 147-166.

#### **Kuumba Kids**

This quasi-experiment estimates the effects on social and emotional competencies of the Kuumba Kids program. The program, held for two hours per week for 16 weeks, offered drama and dance activities and was led by African American artists. The purpose of Kuumba Kids was to develop self-esteem, creativity, and problem-solving. The program was offered in a low-income neighborhood in Rochester, New York. The mean age of participants was nine years. Outcomes for program participants are compared to outcomes for students who did not participate. The implementation year is not reported.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Mason, M. J., & Chuang, S. (2001). Culturally-based after-school arts programming for low-income urban children: Adaptive and preventive effects. *Journal of Primary Prevention*, *22*(1), 45-54.

#### Music therapy-based intervention program

This randomized controlled trial estimates the effects on social skills competence of a music therapy-based intervention program. The program was offered to children ages 6-11 who attended an urban afterschool program. Participants included a mixture of typically developing children and children with generalized social, conduct, and/or behavioral deficits. The five-session program included movement to music, drumming, instrument playing, improvisation activities, singing, and music performance combined with poetic techniques. Outcomes for program participants are compared to outcomes for students who did not participate. The implementation year is not reported.

The study reports improved outcomes but the measures of effectiveness cannot be attributed to the intervention.

Gooding, L. F. (2010). The effect of a music therapy-based social skills training program on social competence in children and adolescents with social skills deficits (Doctoral dissertation). Retrieved from http://diginole.lib.fsu.edu/islandora/object/fsu%3A254290

#### STUDIES OF CAREER/LEADERSHIP PROGRAMS

#### **After School Matters**

This quasi-experiment estimates the effects on school attendance, credit accumulation, and high school graduation of Chicago's After School Matters (ASM). ASM aimed to increase low-income urban adolescents' knowledge of workplace culture and improve their soft skills through paid apprenticeships. Apprenticeships varied but were guided by instructors who provided information and feedback to students regarding workplace standards and culture. Instructors were not certified teachers but had expertise in the field that was a focus of the apprenticeship. Outcomes for program participants are compared to outcomes for students who did not participate. The study was conducted in 2002-03.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Goerge, R., Cusick, G. R., Wasserman, M., & Gladden, R. M. (2007). *After-school programs and academic impact: A study of Chicago's After School Matters (Issue Brief #112)*. Chicago, IL: Chapin Hall Center for Children, University of Chicago.

#### STUDIES OF PHYSICAL ACTIVITY/HEALTH PROGRAMS

#### **Active Winners**

This quasi-experiment estimates the effects of the Active Winners program, which included afterschool and summer fitness activities as well as encouragement for families, schools, and communities to engage in fitness activities. The study was implemented with middle school students in two rural communities in South Carolina. Outcomes for program participants are compared to outcomes for students who did not participate. The implementation year is not reported.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Pate, R. R., Saunders, R. P., Ward, D. S., Felton, G., Trost, S. G., & Dowda, M. (2003). Evaluation of a community-based Intervention to promote physical activity in youth: Lessons from Active Winners. *American Journal of Health Promotion*, 17(3), 171–182.

#### Girls on the Run

This quasi-experiment estimates the effects on physical activity of Girls on the Run. Girls in grades 3-6 participated in a 10-week afterschool program that engaged them in running in preparation for a 5K race, team building activities, goal setting, and discussions of the media's influence on girls' body image. Outcomes for program participants are compared to outcomes for students who did not participate. The study was conducted in 2003-07.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Beller, J. M. (2013). *Positive youth development programs and high school girls' psychosocial behaviors* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3601435)

#### **Kids Living Fit**<sup>™</sup>

This quasi-experiment estimates the effects on weight management of Kids Living Fit<sup>™</sup>, a 12-week fitness program held after school at four elementary schools. Exercise sessions were generally one hour long, were led by a physical fitness trainer, and included activities like aerobic dance, stretching, heart rate monitoring, and yoga. The program also included dietary education presentations by registered dietitians. The presentations included using food models to identify appropriate serving sizes, guessing how long it would take to burn the extra energy found in larger serving sizes, and working in groups to identify the best choice option from fast food menus. Parents were encouraged to attend the four dietary sessions. Outcomes for program participants are compared to outcomes for nonparticipants. The study was conducted in 2006.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Speroni, K. G., Earley, C., & Atherton, M. (2007). Evaluating the effectiveness of the Kids Living Fit™ program: A comparative study. Journal of School Nursing, 23(6), 329-336.

#### Martial arts program

This randomized controlled trial estimates the effects on academic achievement and school attendance of an afterschool martial arts program for high school students. The study was conducted in a mid-sized city in northern New York state. Outcomes for program participants are compared to outcomes for students who did not participate. The implementation year is not reported.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Blowers, J. G. (2007). *Impact of an afterschool martial arts program on at-risk students* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3257356)

#### **NutriActive Healthy Experience**

This quasi-experiment estimates the effects of NutriActive Healthy Experience, a four-week afterschool program for students in kindergarten and first grade, on students' snack choices. The intervention consisted of a 15-minute walk before school and a 90-minute afterschool session with 50-60 minutes of physical activity, a 20-minute classroom lesson on nutrition or body awareness and injury prevention, and a nutritious afterschool snack. Parents of participating students received four weekly newsletters outlining the nutrition concepts covered each week. The study was conducted at four schools, with two schools receiving the program and two serving as comparisons. Outcomes for program participants are compared to outcomes for students who did not participate. The implementation year is not reported.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Matvienko, O. (2007). Impact of a nutrition education curriculum on snack choices of children ages six and seven years. *Journal of Nutrition Education and Behavior*, 39(5), 281-285.

#### Physical activity program (Georgia)

This quasi-experiment estimates the effects on cardiovascular fitness of afterschool physical activity programs for fifth graders in five Georgia schools. The programs were at least nine weeks long and included at least 13 hours of program time. Outcomes for program participants were compared to those for nonparticipants. The implementation year is not reported.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Wilson, R. W. (2016). *The effect of school-based physical activity on fifth grade cardiovascular fitness* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 10156429)

#### STUDIES OF MULTICOMPONENT PROGRAMS

#### 21st Century Community Learning Centers program (Texas)

This quasi-experiment estimates the effects on mathematics and reading achievement of an afterschool program funded by the 21st Century Community Learning Centers program. The study was conducted in two middle schools in Texas during 2014-15. Outcomes for program participants are compared to outcomes for nonparticipants.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Carr, E. M. (2015). Afterschool program interventions that support the academic achievement, behavior, and engagement of at-risk student populations (Doctoral dissertation). University of Houston-Clear Lake, Houston, TX.

#### **After School Education and Safety**

This quasi-experimental study estimates the effects on mathematics and English/language arts achievement for students in grades 3-5 of the After School Education and Safety program. The program sought to create a safe afterschool environment for students; provide academic assistance with a focus on language arts and math; provide enrichment clubs; increase school attendance; and develop positive behavior, social and resiliency skills. The study was conducted in 2005 in one California school district. Outcomes for program participants are compared to those for students who had never attended the afterschool programming.

The study reports both improved and negative outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Gorke, G. K. (2006). Academic intervention instructors: Effectiveness of graduate-level college students as intervention tutors in an afterschool program (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3227047)

#### Afterschool program at the Boys & Girls Club of the Peninsula

This quasi-experiment estimates the effects on English proficiency for English learners in grades 1-7 attending afterschool programs offered by the Boys and Girls Club in San Mateo County, California. The program included an hour of homework help in computer classrooms or working with staff and volunteers, followed by enrichment and recreation activities (e.g., open gym time, arts and crafts, or enrichment programs). Outcomes for program participants are compared to outcomes for students who did not participate. The study was conducted in 2004-08.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

London, R., Gurantz, O., & Norman, J. (2011). The effect of afterschool program participation on English language acquisition. *Afterschool Matters*, Spring, 22-29.

#### Afterschool program for Black males in middle school

This quasi-experiment estimates the effects on academic achievement, social and emotional competencies, and grade promotion of a researcher-developed afterschool program aimed at preventing academic failure and juvenile delinquency among middle school at-risk Black males. The program had three major components: sports activities, study hall, and social issue discussions. All participants and non-participants in the study were recommended by the local school district as being at-risk. Outcomes for program participants are compared to outcomes for those who did not participate. The study was conducted in Florida in 1998-2000.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Collum, R. C., Jr. (2004). An investigation of the impact of participation in an afterschool program on the academic achievement and social behavior of adolescent Black males defined as at-risk (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3098371)

#### Afterschool program operated by EduCare Foundation

This quasi-experiment estimates the effects on academic achievement, school attendance, and credits earned of an afterschool program for high school students. The program offered homework help and enrichment activities. Outcomes for program participants are compared to outcomes for students who did not participate. The study was conducted in Southern California in 2014-15.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Educational Research Consultants. (2016). *EduCare Foundation: After School Program Report Card for 2014-2015*. Retrieved from http://www.ercdata.com

#### **Afterschool programs in South Carolina**

This quasi-experiment estimates the effects on reading and mathematics achievement of afterschool program participation in Greenville County, South Carolina. Participants were fourth and fifth graders attending one of 11 Title I schools. The study does not provide detail about the content of the program. Outcomes for program participants are compared to outcomes for students who did not participate.

The study reports both improved and negative outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Wright, G. B. (2002). *The impact of after school programs on students' academic achievement in Title I schools* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3361423)

#### **Capital Kids programs**

This quasi-experiment estimates the impact on math and reading achievement of Capital Kids programs, offered in Columbus, Ohio for students in elementary and middle grades. The programs provided academic assistance (e.g., homework help, science projects, literacy tutoring, and computer math); enrichment activities (e.g., cooking, field trips, drama club, and art projects); skill building units (e.g., anger management, alcohol/tobacco/drugs, violence, and peer mediation); safety and wellness (e.g., exercise and recreation); and family engagement (e.g., family fun nights, resource referrals, parent-staff conferences, parenting classes, and program newsletters). Outcomes for program participants are compared to outcomes for students who did not participate. The study was conducted in 2003-04.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Anderson-Butcher, D., & Cash, S. (n.d.) Capital Kids evaluation: Overall and site specific results for 2003-2004. Columbus, OH: Ohio State University.

#### Éxito

This quasi-experiment estimates the effects on attendance, promotion, and course grades of Éxito, an afterschool program for students in grades 9-10 who were identified as at-risk of dropping out of school. The program, offered at one high school in Philadelphia during 2009-10, took place four days per week. Students received homework help and participated in project-based learning groups. The study compares outcomes for program participants to outcomes for a matched group of students from the same school and grade who did not attend the program.

The study reports both improved and negative outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Hartmann, T., Good, D., & Edmunds, K. (2011). Éxito: Keeping high-risk youth on track to graduation through out-of-school time supports. Philadelphia: Research for Action.

#### Multi-component afterschool program (New Jersey)

This quasi-experiment estimates the effects of an afterschool program that was implemented in four school-based community learning centers in one urban school district in New Jersey. The programs were offered at three elementary schools and one middle school. Activities included one-on-one homework help; recreation (gym, arts and crafts, table games, and computer time); and enrichment and cultural activities. The study, conducted in 2007-08, compared English language arts outcomes for program participants in grades 4-6 to outcomes for students who did not participate.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Delucci, G. R. (2010). An evaluation of an after-school program for low income elementary and middle school students (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3420956)

#### **Pathways to Progress**

This quasi-experiment estimates the effects on academic achievement and school attendance of Pathways to Progress, an afterschool program offered in five elementary schools and three middle/junior high schools in an urban school district in Minnesota from June 2000 to May 2003. The program offered one hour of academic programming and one hour of recreational or cultural enrichment each day. Outcomes for program participants are compared to outcomes for students who did not participate.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Wahlstrom, K., Sheldon, T., & Lewis, A. (2004). *Final evaluation report: 21st Century Community Learning Centers Pathways to Progress, Saint Paul Public Schools.* St. Paul: University of Minnesota Center for Applied Research and Educational Improvement.

#### **Roosevelt Village Center**

This quasi-experiment estimates the effects on academic achievement, school attendance, arrests, and juvenile delinquency of the Roosevelt Village Center, an afterschool program for Oakland, California students in grades 6-12 offered in 2007. The program, held for three hours daily after school, offered homework help, cultural enrichment, extracurricular activities, and mentoring by college students.

Outcomes for program participants are compared to outcomes for students who did not participate.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Le, T. N., Arifuku, I., Vuong, L., Tran, G., Lustig, D. F., & Zimring, F. (2011). Community mobilization and community-based participatory research to prevent youth violence among Asian and immigrant populations. *American Journal of Community Psychology*, 48(1-2), 77-88.

#### **Seventh Grade Center After-School program**

This quasi-experiment estimates the effects on academic achievement of the Seventh Grade Center After-School program, offered at one school in Missouri. The program consisted of 45 minutes of homework help, followed by option activities, including open gym, swimming, bowling, various clubs, yo-yo club, choir, model-building, student boards, tai-chi, and movie night. Outcomes for program participants are compared to outcomes for nonparticipants. The study was conducted during 2000-01.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Hammett, L. A. (2004). A study of the effects of an after-school program on the discipline and the academic achievement of selected seventh grade students (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3257307)

#### STUDIES OF SPORTS PROGRAMS

#### **Extracurricular activities and sports (Missouri)**

This quasi-experiment estimates the effects on school engagement of participation in high school sports and extracurricular activities. Outcomes for students who participated in sports or activities are compared to outcomes for students who did not participate. The study was conducted in one urban school district in Missouri from 2007-13.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups. The eligible outcomes do not meet review requirements.

Martin, C. J. (2015). Student involvement in extracurricular activities and post-secondary education placement (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 10030342)

#### School-sponsored sports (Delaware)

This quasi-experiment estimates the impact of sports participation on GPA and school attendance during the playing season. Outcomes for in-season athletes are compared to those for out-of-season athletes. Study participants were students in grades 6-8 in Cape Henlopen School District in Delaware during 2012-13.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

O'Grady, S. T. (2013). *Analyzing the effects of in-season sports participation on at-risk student-athletes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3602814)

#### School-sponsored sports (Kansas)

This quasi-experiment estimates the effects on grade point average of participation in school-sponsored sports, using data for all high school students in one suburban Kansas school district. Outcomes for students who participated in at least one sport are compared to outcomes for students who did not participate in any sports during 2014-15.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Higgins, J. D. (2016). *Get in the game: A study of the relationship between participation in extracurricular activities and academic achievement in the Shawnee Mission School District* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 10112403)

#### School-sponsored sports (Minnesota)

This quasi-experiment estimates the effects on school engagement of participation in school sports and/or cheerleading. The comparison group did not participate in any sports. The study was conducted in one rural high school in Minnesota in 2001-02.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Dallman, R. (2004). Students' bond to their school and interscholastic athletics in a consolidated school (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3163140)

#### School-sponsored sports (Nebraska)

This quasi-experiment estimates the effects of participation in interscholastic sports on GPA, math achievement, and math grades of eight graders. The comparison group did not participate in any sports. The study was conducted in one school in Omaha, Nebraska in 1998-99.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Stephens, L. J., & Schaben, L. A. (2002). The effect of interscholastic sports participation on academic achievement of middle level school students. *NASSP Bulletin*, 86(630), 34-41.

#### School-sponsored sports (Tennessee)

This quasi-experiment estimates the effects on academic achievement and school attendance of participation in high school varsity sports. Outcomes for students who participated in sports are compared to outcomes for students who did not participate. The study was conducted in ten high schools in Tennessee during 2004-05.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Stencel, J. R. (2005). A study of the relationship between interscholastic athletic participation and academic achievement for a group of Tennessee high school students (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3197287)

#### School-sponsored sports (Wisconsin)

This quasi-experiment estimates the effects on academic achievement and school attendance of participation in high school varsity sports. Outcomes for students who participated in sports are compared to outcomes for students who did not participate. The study was conducted in two suburban high schools in Wisconsin during 1994-98.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Kaufmann, A. M. (2002). *Interscholastic sports participation as a predictor of academic success for high school students* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3047511)

#### School-sponsored sports (Worcester, Massachusetts)

This quasi-experiment estimates the impact of sports participation on social and emotional competencies for seventh grade students in three middle schools in Worcester, Massachusetts. Outcomes for students who participated in sports are compared to outcomes for students who did not participate.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

McHale, J. P., Vinden, P. G., Bush, L., Richer, D., Shaw, D., & Smith, B. (2005). Patterns of personal and social adjustment among sport-involved and noninvolved urban middle-school children. *Sociology of Sport Journal*, 22(2), 119-136.

#### STUDIES OF SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS (STEM PROGRAMS)

#### Afterschool science club for middle grades girls

This quasi-experiment estimates the impact on attitudes toward science of an afterschool science club for seventh and eighth grade girls. Seventh grade science club participants worked on hands-on electrical circuit activities, talked with female scientists at a local university about their research and how they became involved in science, and participated in monthly field trips to a science center, a materials testing company, and scientific laboratories at the university. Eighth grade participants took part in the career/role-modeling sessions and the hands-on electrical circuit activities. Outcomes for program participants are compared to outcomes for nonparticipants. The study was conducted in 2003-04.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Waldron, A. (2006). A mixed methods evaluation of an afterschool science club's influence on adolescent girls' attitudes toward science (Doctoral dissertation). Retrieved from https://www.researchgate.net/publication/34902800\_A\_mixed\_methods\_evaluation\_of\_an\_afterschool\_science\_club's\_influence\_on\_adolescent\_girls'\_attitudes\_toward\_science

#### **Beyond Blackboards**

This quasi-experiment estimates the effects on school engagement of Beyond Blackboards, an afterschool robotics and engineering club offered at three middle schools in Cave Creek School District in Texas. The clubs were supported by teachers, who served as advisors, as well as engineering faculty, undergraduate students, and engineers from local companies who served as technical mentors and role models. Outcomes for program participants are compared to outcomes for nonparticipants. The study was conducted in 2010-11.

The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups. The eligible outcomes do not meet review requirements.

Blanchard, S., Judy, J., Muller, C., Crawford, R. H., Petrosino, A. J., White, C. K., ... & Wood, K. L. (2015). Beyond blackboards: Engaging underserved middle school students in engineering. *Journal of Pre-college Engineering Education Research*, *5*(1), 1-14.

#### Science Café

This quasi-experiment estimates the effects on STEM interest and engagement with schooling of Science Café, an afterschool program designed to foster high school students' interest in STEM disciplines. Scientists conduct informal early evening presentations in casual settings on various topics. High school students run all aspects of the Science Café meetings. The study was conducted in four towns in New Mexico in 2010.

The study reports an improved outcome but does not adequately control for pre-existing differences between the program and comparison groups.

Hall, M. K., Foutz, S., & Mayhew, M. A. (2012). Design and impacts of youth-directed Café Scientifique program. *International Journal of Science Education, Part B: Communication and Public Engagement*, 1-24.

#### Science, technology, engineering, and mathematics education programs (New Jersey)

This quasi-experiment estimates the effects on attitudes toward, interest in, and enjoyment of science of STEM afterschool programs. Study participants were in grades 4-6 in three New Jersey school districts. The districts used different approaches to their STEM afterschool programming. For example, one district offered a combination of sports science, engineering, and science (Biology, Chemistry, Forensics, Physical Science). Outcomes for programs participants were compared to outcomes for non-participants. Another district partnered on its STEM afterschool program with a state-run informal learning institution and included aquatics projects.

The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Smith, C. F. (2015). *Transforming attitudes and lives: Liberating African-American elementary and middle school students in out-of-school time STEM education* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3684470)

# **APPENDIX EG-3**

STUDIES WITH INSUFFICIENT INFORMATION TO ASSIGN AN EVIDENCE TIER

#### About studies with insufficient information to assign an evidence tier

In some cases, study authors did not report all the information we needed to assign an evidence tier. For example, sometimes they did not report information on the statistical significance of a finding or enough information for us to compute the statistical significance ourselves. Without information on whether a finding is significant or not, the tier cannot be determined.

#### 21ST CENTURY COMMUNITY LEARNING CENTERS PROGRAM (SAN FRANCISCO)

#### **Program type: Multicomponent**

This quasi-experiment examines the effects of afterschool programs operated at four middle schools in San Francisco. The programs, funded by the 21st Century Community Learning Centers program, included an academic component (homework time, one-on-one tutoring) and enrichment activities such as rock climbing, cooking class, and social activities. Reading and math achievement and attendance for participants are compared to outcomes for a matched group of non-participants. The study was conducted during 1998-99.

Trousdale, D. (2000). First-year evaluation of an after-school program for middle school youth. ERS Spectrum, 18(3), 3-11.

#### GROWING OPTIMALLY, GIRLS IMPROVING HEALTH AND RAISING LEVELS OF SELF-EFFICACY (GO-GIHRLS)

#### Program type: Physical activity/health

The Growing Optimally, Girls Improving Health and Raising Levels of Self-efficacy (GO-GIHRLS) program was an afterschool nutrition and exercise program designed to improve nutrition knowledge and increase physical fitness among fourth and fifth grade girls at a selective elementary school. Physical activities varied each week but including running, basketball, soccer, dancing, kickball, softball, calisthenics, etc. Nutrition classes were taught by an experienced nutrition educator.

Beckemeyer, P. (2009). An intervention study of pre-teen girls to improve eating behavior and physical activity levels: Growing Optimally, Girls Improving Health and Raising Levels of Self-efficacy (GO-GIHRLS) (Doctoral dissertation). DeKalb, IL: Northern Illinois University.

#### **SMART**

#### **Program type: Academic**

The Boys and Girls Clubs SMART program was a multifaceted intervention targeted to second and third grade students with the goal reducing their risk of future substance abuse. The SMART Kids prevention curriculum was offered as part of the Boys and Girls Club's afterschool program and was coupled with tutoring and homework help. SMART Teachers linked the Boys and Girls Clubs with children's school and SMART Parents supported parents to help their children succeed in school.

St. Pierre. T. L., Mark, M. M., Kaltreider, D. L., & Campbell, B. (2001). Boys & Girls Clubs and school collaborations: A longitudinal study of a multicomponent substance abuse prevention program for high-risk elementary school children. *Journal of Community Psychology*, 29(2), 87-106.

#### WAKE COUNTY SUPER OPPORTUNITIES WITH AFTER-SCHOOL RESOURCES

#### **Program type: Academic**

This quasi-experiment sought to estimate the effects on student academic outcomes of the Wake County Super Opportunities with After-School Resources (SOAR) afterschool program. The study examined outcomes for high school students. The program offered academic assistance in core subjects, computer skills, Nova NET (an online computer application for skill remediation and recovery of high school course credit), SAT prep, and life skills training. Each high school program offered sessions three or four days a week, from 2 to 3.5 hours per day.

Nears, K. (2007). The achievement gap: Effects of a resilience-based after school program on indicators of academic achievement. (Doctoral dissertation). Retrieved from https://repository.lib.ncsu.edu/handle/1840.16/3402

#### WRITING TO LEARN AFTERSCHOOL PROGRAM

#### **Program type: Academic**

This quasi-experimental study estimates the effects of "writing to learn strategies" on mathematics, science, and language arts outcomes for students in grades 4-7 who scored Partially Proficient on the New Jersey state standardized assessment. Instruction in these strategies was offered for 90 minutes after school for 12 weeks during the 2013-14 school year. Comparison students received general remediation in an afterschool setting.

Tarchichi, R. (2017). The impact of mathematics, science and language arts writing to learn strategies on the culture of learning in primary and secondary students (Doctoral dissertation). Retrieved from https://rdw.rowan.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=3361&context=etd

# **APPENDIX EG-4**

STUDIES OF PROGRAMS THAT COMBINE AFTERSCHOOL & SUMMER LEARNING ACTIVITIES

#### About studies of programs with both afterschool and summer learning components

This appendix describes studies that 1) examine the effects of year-round programs that include both summer and school year activities, where a majority of activities do not occur during the school year; 2) provide required information to assign an ESSA tier; and 3) do not separately estimate the effect of the afterschool component. Although these studies of year-round programs are not eligible for this review, we present brief summaries here because they may be useful to decision-makers considering year-round out-of-school programming.

#### STUDIES OF AFTERSCHOOL/SUMMER LEARNING PROGRAMS THAT MEET CAUSE-AND-EFFECT REQUIREMENTS FOR ESSA TIER II

#### **Extended Day Treatment Program**

This quasi-experiment estimates the effects of the Extended Day Treatment Program (EDTP) on impulse control, prosocial behavior, and empathy for students ages 6 to 12 with emotional and behavioral disorders. Children attended the program after school and/or during the summer. Outcomes for students who participated in EDTP are compared to outcomes for students who attended the same schools as treatment students of similar age, gender, and behavioral issues who did not participate in EDTP. The study found that boys in the treatment group showed a greater increase in empathy than boys in the comparison group. No significant group differences were found for impulse control or prosocial behavior.

Wyatt, J. M. (2002). An outcome evaluation of an after-school program for children with emotional and behavioral disorders (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3055298)

#### **Taking Action Together**

This quasi-experiment examines the effects on BMI, nutrition, and physical activity of Taking Action Together, a community-based intervention to reduce the risk of type 2 diabetes mellitus among low-income, high-BMI, 9-10-year-old Black children. Outcomes for participating children across two sites were compared to outcomes for comparison group children, who were offered a free week of traditional YMCA summer camp. The study found that a larger percentage of children in the treatment decreased BMI z-scores after one year, compared to children in the comparison group. The study did not provide results for the nutrition or physical activity outcomes.

Ritchie, L. D., Sharma, S., Ikeda, J. P., Mitchell, R. A., Raman, A., Green, B. S., ... & Fleming, S. E. (2010). Taking Action Together: A YMCA-based protocol to prevent type-2 diabetes in high-BMI inner-city African American children. *Trials*, *11*(1), 60.

## STUDIES OF AFTERSCHOOL/SUMMER LEARNING PROGRAMS THAT MEET CAUSE- AND-EFFECT REQUIREMENTS FOR ESSA TIER IV Build IT

This quasi-experiment examines the effects on attitudes and interests in IT careers of Build IT, an afterschool and summer STEM program for middle school girls. The program uses IT professionals to guide girls through developing communications technologies using simple programming tools. The study reports that there were no statistically significant effects of the program.

The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Koch, M., Georges, A., Gorges, T., & Fujii, R. (2010). Engaging youth with STEM professionals in afterschool programs. *Meridian Middle School Computer Technologies Journal*, *13*(1), 1-10.

#### Informal Science Education Out-of-School Time Enrichment Programs

This quasi-experiment examines the effects of participation in science-related out-of-school time enrichment programs on African American middle and high school students' racial identities, attitudes about science, and self-reported science achievement. Students participated in year-round science programs with activities both afterschool and over the summer. The study was conducted in an urban setting in the Mid-Atlantic region in 2007. The study reports that there were no statistically significant effects of the program.

The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups and the outcomes do not meet review requirements.

James, S. M. (2007). *Identity and science learning in African American students in informal science education contexts* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3300822)

#### **Ninth Grade Success Initiative**

This quasi-experiment examines the effects on student credit accumulation and grade promotion of a basic skills program for ninth grade students at risk of not earning enough credits for promotion to tenth grade. The self-paced program operated for two hours after school and Monday through Thursday over the summer. It used a curriculum focused on the Texas Essential Knowledge Skills that all students in the state are expected to learn. The study was conducted in one high school in Texas in 2001-02. The study reports that there were no statistically significant effects of the program. The study does not meet requirements for a higher evidence tier because it does not adequately control for pre-existing differences between the program and comparison groups.

Watson, N. (2003). *The effects of the ninth grade success initiative at Pearland High School* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3094018)

#### **Open Doors Academy**

This quasi-experiment examines the effects of Open Doors Academy on the achievement-related behaviors, developmental assets, and academic achievement of middle and high school students in three Ohio school districts. Open Doors Academy is a year-round out-of-school enrichment program that includes tutoring/academic support and daily enrichment activities. The study reports improved outcomes but does not adequately control for pre-existing differences between the program and comparison groups.

Grassi, A. M. (2012) *Quality after-school programming and its relationship to achievement-related behaviors and academic performance* (Doctoral dissertation). Retrieved from https://etd.ohiolink.edu/!etd.send\_file?accession=csu1354646131&disposition=inline

#### Supplemental Education Services (SES) at one Georgia School

This quasi-experiment estimated the effects of supplemental education services for at-risk eighth grade students on reading and math Georgia Criterion Referenced Competency Test (CRCT) scores, compared to seventh grade non-participants. Tutoring services were available afterschool, on Saturdays, and over the summer. The study reports improved outcomes but the outcomes cannot be attributed solely to the intervention; grade level is completely confounded with intervention receipt.

Maxwell, J. B. (2010). The impact of supplemental education services program on middle school at-risk learners' math and reading scores (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses Database (UMI No. 3403821)