

# INFORMATION CAPSULE

**Research Services** 

Vol 1509 June 2016 Christie Blazer, Supervisor

# AFTER-SCHOOL ACADEMIC ENRICHMENT PROGRAMS

#### At a Glance

Academic enrichment programs can be offered before or after school, on Saturdays and holidays, or during the summer, but the majority of programs take place after school. Program components range from academic lessons in the core content areas to recreational and enrichment activities. Most programs also include homework help and/or tutoring. This Information Capsule summarizes research findings on the best practices for developing high-quality academic enrichment programs. Research on the impact of participation in academic enrichment programs on students' academic performance is also reviewed. A sampling of after-school enrichment programs offered in states and school districts across the U.S. is provided. Finally, Miami-Dade County Public Schools' academic enrichment program is summarized.

The number of U.S. children attending after-school programs has been steadily increasing. In 2014, the most recent year for which data were available, approximately 10.2 million students, representing about 23 percent of U.S. families, were enrolled in an after-school program. Of the students attending after-school programs, the majority do so at their own schools (43% at public schools and 11% at private schools), while child care centers and community and religious organizations operate most other after-school programs (Afterschool Alliance, 2014a).

After-school programs provide a range of high-quality enrichment activities designed to support students' learning and development. These activities reinforce and complement students' regular academic program during non-school hours (Missouri Department of Elementary and Secondary Education, 2015; Afterschool Alliance, 2014b; Beckett et al., 2009; National Education Association, 2008; Briggs-Hale et al., 2006). According to the Afterschool Alliance (2015a), afterschool programs are "a perfect example of a field that has wholeheartedly embraced the reality that learning takes place both inside the classroom and out. When the last school day bell rings, students leave their classrooms, but their minds do not turn off."

Academic enrichment programs can be offered before or after school, on Saturdays and holidays, or during the summer, but the majority of programs take place after school. Program components range from academic lessons in the core content areas to enrichment activities (e.g., visual and performing arts, music, cooking, gardening, health and nutrition, cultural activities, and technology) and recreation (e.g., sports, dance, drill team, and outdoor games). Most programs also include homework help and/or tutoring. The majority of programs employ unique and innovative strategies to engage students in the after-school setting and place a special emphasis on making learning fun (Afterschool Alliance, 2015a; Huang & Dietel, 2011; Coltin, 2010).

A large number of after-school programs focus predominantly on youth's social and emotional development. They are aimed at improving students' attendance rates and attitudes toward school, as well as reducing the incidence of risky, inappropriate, and disruptive behaviors. This paper, however, focuses on after-school programs that are primarily designed to support students' academic growth.

#### **Best Practices**

Researchers have found that high quality academic enrichment programs engage in the following practices:

- **Clearly communicate program goals.** In high-quality academic enrichment programs, instructors clearly state the learning objectives and then lead students through structured learning activities that are aligned to the program's goals (Afterschool Alliance, 2014c; Texas Education Agency, 2013; Huang & Dietel, 2011; Chung, 2000).
- **Meet local needs.** The most effective academic enrichment programs develop activities to meet the particular needs of students in their local communities (Green, 2014; Office of the Mayor of New York City, 2014; Chung, 2000).
- Complement school-day learning. The curriculum in academic enrichment programs should be aligned to school-day learning objectives. However, programs should complement, not simply duplicate or extend, the school day, by providing alternative activities that supplement school-day learning (Afterschool Alliance, 2015b; Office of the Mayor of New York City, 2014; Texas Education Agency, 2013; Lauver, 2012; David, 2011; Huang & Dietel, 2011; National Education Association, 2008; Education Development Center, 2006; Britsch et al., 2005; Chung, 2000; SEDL, n.d.).
- Communicate with school-day instructional staff. To ensure that programs have a clear linkage to the school day, frequent communication should be maintained between school-day classroom teachers and instructors from academic enrichment programs (Lauver, 2012; David, 2011; Fleming, 2011; Beckett et al., 2009; Briggs-Hale et al., 2006; SEDL, n.d.).
- Provide a combination of academic, enrichment, and recreational activities. Studies have concluded that the most effective after-school programs provide students opportunities to engage in a combination of diverse academic, enrichment, and recreational activities (Afterschool Alliance, 2014a; Texas Education Agency, 2013; Mazar, 2012; Huang et al., 2010; Britsch et al., 2005). According to the Office of the Mayor of New York City (2014), "The best programs stimulate curiosity and imagination, while also improving the '21<sup>st</sup> Century skills' needed for success in school and work – including self-advocacy, teamwork, communication and critical thinking."
  - Successful programs offer a challenging academic curriculum that includes learning activities in the core academic subjects. These activities are designed to

build basic literacy and STEM skills, as well as critical thinking and problemsolving skills (Afterschool Alliance, 2014c; Office of the Mayor of New York City, 2014).

- High-quality programs include educational enrichment activities that complement academic learning in areas such as the visual and performing arts, music, health and nutrition, and college and career preparation (New York City Department of Education, 2016; California Department of Education, 2015; Missouri Department of Elementary and Secondary Education, 2015).
- Studies have found that learning is enhanced when students are provided with opportunities to engage in physical activities, such as dance, martial arts, aerobics, and athletic programs (Huang et al., 2010; Briggs-Hale et al., 2006; Chung, 2000).
- Provide homework support. Researchers have found that the provision of homework assistance in after-school programs can have a positive impact on students' academic achievement (California Department of Education, 2015; Britsch et al., 2005; Chung, 2000). SEDL (n.d.) recommended that after-school programs designate time for homework completion, with program staff actively assisting students in developing organizational, time management, and study skills. Miller (2003) pointed out that after-school programs can help to address the socioeconomic inequities that homework can exacerbate, including differences in access to computers and the Internet, adults who can help with assignments, and space conducive to completing assignments.
- Offer tutoring sessions. Successful after-school programs offer students tutoring in the core academic subjects. Several studies have concluded that programs that provide students with high-quality and frequent one-to-one tutoring have positive effects on student achievement (California Department of Education, 2015; Beckett et al., 2009; Briggs-Hale et al., 2006; Britsch et al., 2005; Lauer et al., 2003; Chung, 2000; SEDL, n.d.).
- Include hands-on activities. Effective academic enrichment programs provide opportunities for students to engage in hands-on activities. Studies have found that students are more engaged in their learning when they are provided with activities that turn learning from a passive activity into an interactive experience (Afterschool Alliance, 2015b; Green, 2014; Huang et al., 2010; Beckett et al., 2009, SEDL, n.d.).
- Link activities to students' lives. Experts recommend that academic enrichment programs make learning relevant by connecting instruction to students' real lives. Studies have found that student engagement in the learning process increases when activities are connected to their interests and experiences (Afterschool Alliance, 2015a; Huang et al., 2010; Beckett et al., 2009; Briggs-Hale et al., 2006; Britsch et al., 2005; Miller, 2003; SEDL, n.d.).

- Integrate technology into activities. Studies have found that after-school programs are the ideal setting for introducing technology-enriched activities that promote learning. Technology-enriched activities provide opportunities to reinforce reading, math, and writing skills, as well as to assist in the completion of homework and school assignments (Missouri Department of Elementary and Secondary Education, 2015; Huang & Dietel, 2011; Heath, n.d.; SEDL, n.d.).
- **Promote collaboration among students.** Studies have found that peer networks have the ability to increase students' enthusiasm for learning. When students work together in small collaborative groups, they are able to discuss concepts, compare and contrast other students' problem-solving strategies, and articulate their own thinking (Afterschool Alliance, 2015a; Beckett et al., 2009; Stiegelbauer, 2008; Briggs-Hale et al., 2006; Education Development Center, 2006; Miller, 2003).
- **Provide students with individualized attention.** After-school programs should deliver academic instruction in a way that corresponds to each student's individual learning needs. Experts agree that effective academic enrichment programs are able to accurately determine the appropriate difficulty level and pace at which students should be taught knowledge and skills (Office of the Mayor of New York City, 2014; Huang et al., 2010; Beckett et al., 2009).
- Create a flexible environment. Scholars agree that academic enrichment programs should be less formal than the regular school day. High-quality programs provide students with the opportunity to explore ideas in a flexible environment, with fewer boundaries and time constraints than are present during the school day (Afterschool Alliance, 2015a; Briggs-Hale et al., 2006; Education Development Center, 2006; Britsch et al., 2005; Miller, 2003).
- Create a supportive setting. Successful academic enrichment programs encourage students to expand their knowledge and practice their newly learned skills in a supportive setting. Academic enrichment programs are most effective when students are allowed to learn in a low-stakes environment in which mistakes are used as learning opportunities and growth experiences (Afterschool Alliance, 2014b; Office of the Mayor of New York City, 2014; Huang et al., 2010). The Education Development Center (2006) noted, "For some, school carries with it a fear of failure and we don't want to import that fear into the afterschool environment."
- Hire and retain quality staff. Academic enrichment programs need staff who are qualified and committed, have appropriate experience, work well with regular school staff, understand students' learning needs, relate well to students, model high expectations, and motivate and engage students (Afterschool Alliance, 2014c; Lauver, 2012; Mazar, 2012; David, 2011; Huang & Dietel, 2011; National Education Association, 2008; Chung, 2000). Huang and Dietel (2011) also found that high functioning after-

school programs tended to have low staff turnover rates. In addition, studies have concluded that ongoing staff training and professional development are keys to after-school programs' success (Coltin, 2010; Beckett et al., 2009; National Education Association, 2008; Education Development Center, 2006; Chung, 2000; SEDL, n.d.).

- Involve families. Studies have consistently shown that family involvement in their children's school-day education has a positive impact on academic achievement. Researchers have concluded that involving families in after-school programs is equally important. Examples of ways in which academic enrichment programs inform and involve parents include monthly newsletters, orientation sessions, workshops, conferences, and opportunities to volunteer. Programs can demonstrate that parents' input is valued by requesting feedback through annual parent surveys and encouraging the formation of parent committees (Afterschool Alliance, 2014c; Green, 2014; Huang & Dietel, 2011; National Education Association, 2008; Chung, 2000).
- Involve community partners. Successful academic enrichment programs collaborate with community partners to enhance student learning. Community partners can provide a wide range of resources to assist after-school programs, such as donated materials, expertise, mentors, tutors, guest speakers, and service learning experiences (Afterschool Alliance, 2015a; Missouri Department of Elementary and Secondary Education, 2015; Green, 2014; Texas Education Agency, 2013; Huang et al., 2010; National Education Association, 2008; Stiegelbauer, 2008; Chung, 2000).
- Evaluate programs. Researchers agree that ongoing evaluation of academic enrichment programs is needed to monitor program effectiveness (Huang et al., 2010; Beckett et al., 2009; Briggs-Hale et al., 2006; Chung, 2000). The Afterschool Alliance (2014c) stated, "Ongoing program evaluation and improvement is a promising practice that helps hold programs accountable to high quality standards; [and] allows programs to reflect, reassess, recalibrate and further develop and improve upon their program content and service delivery."

# **Research on Academic Enrichment Programs**

The following conclusions can be drawn regarding the impact of participation in academic enrichment programs on students' levels of achievement.

Participation in academic enrichment programs can lead to increased levels of academic achievement. A number of studies have concluded that academic enrichment programs lead to increased levels of student achievement (Afterschool Alliance, 2015c; Herrera et al., 2013; Lauver, 2012; Fleming, 2011; Gardner et al., 2009; Institute of Education Sciences, 2009; National Education Association, 2008; Stiegelbauer, 2008; Britsch et al., 2005; Lauer et al., 2003; Miller, 2003; Chung, 2000). For example, Black and colleagues (2009) found that enhanced after-school instruction in mathematics led to approximately one month's worth of extra mathematics learning and Romash and colleagues (2010) reported that participation in the Save the Children

literacy program resulted in the equivalent of three months of additional learning in reading.

Several studies on the impact of academic enrichment programs on students' achievement have produced mixed findings, but researchers point that that some of these studies provided little insight into program quality. For example, some programs may not have spent enough time engaged in academic content to produce measurable gains in achievement (Mazar, 2012; David, 2011; Beckett et al., 2009).

Some researchers have suggested that academic enrichment programs may impact mathematics and language arts differently, with several studies finding that programs have a greater impact on students' mathematics achievement than on their language arts achievement (Mazar, 2012; Black et al., 2009; Huang et al., 2008; Vandell et al., 2007).

• Increases in students' levels of academic achievement are more likely when students attend programs for a longer period of time. Research examining the effect of participation in after-school programs has found that students who attend programs for one or more years are more likely to demonstrate increases in their achievement than those who attend for a shorter period of time (Afterschool Alliance, 2015c; Herrera et al., 2013; David, 2011; Gardner et al., 2009; Stiegelbauer, 2008; Goldschmidt & Huang, 2007; Lauer et al., 2003; Miller, 2003).

Mazar's (2012) study of 21<sup>st</sup> Century Community Learning Centers (federally funded partnerships between schools and communities that offer academic and enrichment activities to at-risk children) in five elementary schools found that longer periods of participation led to increased levels of student performance. Effect sizes were largest after three years of participation for mathematics and after two years of participation for language arts.

Some studies have focused on the number of days students attend after-school programs during each school year. For example, the Texas Education Agency's (2013) evaluation of grades 4-11 students attending 21<sup>st</sup> Century Community Learning Centers found that participation in the program was associated with an increased likelihood of grade promotion. Effects were strongest after students had participated in the program for 60 days, but the program also had a positive effect on students who participated for at least 30 days. Similarly, Huang and colleagues' (2008) study of LA's BEST after-school program concluded that regular after-school program attendance of at least 100 days per year was necessary to reap program benefits in mathematics. (Program attendance did not have an impact on performance in English language arts.)

• Students benefit when they participate in a variety of activities. Studies have found that after-school program activities do not need to focus solely on academic content to have positive effects on student achievement. In fact, researchers agree that a diverse set of activities is needed to maintain students' interest and engagement in learning (Afterschool Alliance, 2014a; Texas Education Agency, 2013; Mazar, 2012; Huang et al., 2010; Britsch et al., 2005). Programs that combine social enrichment activities, such as cooking and gardening, with instruction in the core subject areas have been found to

have positive effects on student achievement (David, 2011; Briggs-Hale et al., 2006; Lauer et al., 2003). Mazar (2012) pointed out that some researchers "are suggesting that enrichment activities may be more beneficial to students as they represent a departure from the typical school day, allow mastery of new skills, and provide added variety."

- Low-achieving students may benefit more from participation in academic enrichment programs than their higher-achieving peers. Some studies have found that struggling students demonstrate larger achievement gains after they participate in after-school programs than high-achieving students. Researchers have suggested that many of the conditions that are linked to poor achievement (e.g., low expectations by teachers, students' alienation from school, and lack of enrichment activities) can be reversed through participation in academic enrichment programs (Office of the Mayor of New York City, 2014; Gardner et al., 2009; Huang et al., 2008; Britsch et al., 2005; Lauer et al., 2003; Miller, 2003). Stiegelbauer (2008) theorized that low-achievers are often disengaged from the school day and therefore benefit more from the active, experiential, and collaborative style of learning that is common in after-school programs.
- Academic enrichment programs have the potential to increase educational equity. After-school programs provide low-income students with access to previously unavailable enrichment activities that are common to their higher-income peers (Office of the Mayor of New York City, 2014; Gardner et al., 2009; Stiegelbauer, 2008; Britsch et al., 2005; Miller, 2003). Mazar (2012) noted, "After-school programs are often seen as an avenue to bridge the achievement gap among disadvantaged children and their more affluent peers. . . If children do not learn basic skills early on, they are more likely to fail higher levels of schooling. . . This makes the role of after-school programs all the more crucial in helping disadvantaged children at young ages catch up to their more affluent peers."

# Sampling of After-School Programs Across the U.S.

Following is a sampling of after-school programs offered in states and school districts across the U.S:

The 21<sup>st</sup> Century Community Learning Centers (21<sup>st</sup> CCLC) is an initiative of the U.S. Department of Education and is a source of federal funding for many after-school programs in the U.S. Grants are awarded to State educational agencies, which in turn manage statewide competitions and award grants to eligible school districts, community-based organizations, or other public or private entities. The initiative supports the creation of community learning centers that provide academic enrichment opportunities during non-school hours for children, particularly students who attend high-poverty and low-performing schools. The program helps students meet state and local standards in core academic subjects, provides students with a variety of enrichment activities that complement their regular school-day programs, and offers literacy and other educational services to the families of participating children (U.S. Department of Education, 2016).

#### Los Angeles Unified School District (LAUSD):

- The Beyond the Bell branch of the LAUSD ensures that all students in the school district have access to high-quality, safe, and supervised programs that engage and inspire learning beyond the regular school day. Beyond the Bell programs include academic tutorial programs, recreational programs (including intramural sports, structured physical activity, dance, and aerobics), and enrichment programs (including life skills, art, cooking, and music). The program served over 178,000 LAUSD students in over 600 schools during the 2013-2014 school year. Thirty-four percent of students participated in academic assistance programs, 25% participated in academic enrichment programs, 26% participated in sports and recreation programs, and 16% participated in visual and performing arts programs (LAUSD Beyond the Bell Branch, 2016).
- LA's BEST (Better Educated Students for Tomorrow) is a community organization that partners with LAUSD to provide students with after-school education, enrichment, and recreation programs. The program serves over 25,000 LAUSD students ages 5 to 12 at 194 elementary schools in high-risk neighborhoods. LA's Best core activities have been divided into what the program calls "three and a half beats:" help with homework, a learning activity that boosts core academic skills, something that is "new and just plain fun," and a nutritious snack. These components provide structure to a program that is otherwise highly customized, based on students' needs and the site staff's interests and experiences. Over the years, the program has added many enhanced after-school programs to its core offerings, including an arts program, a computer and software applications program, a science program, a writing program, and a junior economics program (Doyle, 2015; Fleming, 2011; LA's Best, n.d.).

#### • New York City:

The City of New York's Department of Youth and Community Development operates the Comprehensive After School System of New York City (COMPASS NYC). COMPASS NYC is comprised of over 900 centers serving approximately 97,000 K-12 students. Located at public and private schools, community centers, religious institutions, public housing, and recreational facilities throughout the city, the program offers a strong balance of academic, recreational, enrichment, and cultural activities to support and strengthen the academic, social, and emotional development of young people. Key elements of the program include opportunities for students to explore their interests and creativity, integration of literacy and STEM skills, high-quality arts and sports instruction, and an emphasis on student engagement and making learning fun. COMPASS NYC has three models that offer a continuum of programming: an elementary school mode (COMPASS NYC), a middle school model (School's Out New York City), and a transition to high school (THS) model for incoming high school ninth graders (City of New York, 2016a; New York City Department of Education, 2016).

- The City of New York's Department of Youth and Community Development also operates Beacon Programs throughout New York City. The program serves children age 6 and older and adults. There are currently 80 Beacon centers located at New York City Department of Education schools throughout the five boroughs, operating in the afternoons and evenings, on weekends, and during school holidays and vacation periods, including the summer. The Beacon program is designed to help students acquire the skills and attitudes they need to graduate from high school, succeed in their chosen career, and give back to the community. The program includes activities focused on academic enhancement, life skills, career awareness, civic engagement, recreation/health and fitness, and culture and the arts. Adult programs, such as GED preparation and ESOL classes, are also offered at the centers (City of New York, 2016b; New York City Department of Education, 2016).
- Texas. School districts throughout Texas operate one of the largest statewide after-school programs in the country, Texas After School Centers of Education (ACE). During the 2014-2015 school year, the ACE program, federally funded through the 21<sup>st</sup> CCLC initiative and administered by the Texas Education Agency, served almost 10,000 teachers and close to 180,000 students in 164 school districts. The program was designed to foster students' academic success by improving their attendance, behavior, and academics. Program activities focus on four areas: (1) tutorials for students before and after school; (2) enrichment activities for students to explore science, technology, and the arts; (3) activities and training to help families support their children; and (4) guidance and field trips that help students and their families access information about colleges and careers (Houston Independent School District, 2016; Texas Education Agency, 2016).
- Charlotte-Mecklenburg Schools (CMS). CMS' After School Enrichment Program (ASEP) supplements the learning taking place during the school day using a curriculum correlated with the Common Core and Essential Standards. The program also offers arts, music, drama, dance, sports, technology integration, and nutrition and fitness activities. Students are provided with homework assistance on a daily basis. ASEP students performing below grade level on the previous year's assessments in reading and mathematics are invited to participate in academic tutorials (Charlotte-Mecklenburg Schools, 2016).

#### On a Local Note

Miami-Dade County Public Schools' (M-DCPS) After-school Enrichment Program (AEP) was redesigned in 2015-2016 in 70 Title I schools. AEP is an after-school enrichment program designed to offer students activities and experiences that develop their critical and creative thinking skills and go beyond the core curriculum. AEP provided funding for two hours a week of after-school services for up to two teachers from each school. These teachers provided enrichment classes in two component areas to 50 students in grades K-8 (minimum of 25 students per component area). This after-school model was implemented in 70 schools,

impacting 2,799 students (1,114 African American students, 1,530 Hispanic students, 101 White students, and 54 students classified as "Other").

Following are descriptions of AEP's curriculum components:

- Art Appreciation. The Art Appreciation component of the AEP provides an in-depth understanding of art as the process through which hands-on experience and critiquing methods are applied. Through this process, students view master works of art, art pieces created by their classmates, and their own original works of art. Follow-up activities include various art themes and genres by artists through the ages that reinforce students' knowledge and skills in the content area of art history. The related activities are aligned with the Florida State Standards for the visual arts. These activities expose students to the following domains: critical thinking and reflection, organizational structure, historical and global connections, as well as skills, techniques and process, and finally, innovation, technology, and the future. These domains are supported through a museum component that includes virtual field experiences introduced through technology and the use of Promethean Whiteboards. The curriculum applies the tools and standards needed to engage students in the acquisition of 21<sup>st</sup> century skills in order to become successful in a 21<sup>st</sup> century global society.
- Accentuate the Positive: Song Lyric Writing. This component of the AEP is a lyric writing program that teaches students about the art of songwriting and introduces them to the songs of the Great American Songbook. At the center of this component is a student activity guide that explains how a song is born, how music and lyrics are conceived and written, and how these songs reflect our passions and ideals. Students learn to write their own original lyrics and to strengthen their storytelling abilities and use of literary devices, including imagery, metaphors, similes, rhythm, and rhyme.
- STEAM Immersion/Acceleration: Science Fair and SECME. The South Florida Science and Engineering Fair (SFSEF), Elementary Science Fair, and the SECME Olympiad and Festival are parts of the M-DCPS STEM Expo that showcases the knowledge, skill, and achievements of K-12 students in science, technology, engineering and mathematics (STEM). Both Science Fairs allow students to showcase their research on display boards while being interviewed about their work. SECME engages students, teachers, and parents in STEM through design and build projects, and through Saturday seminars at local colleges and universities, in partnership with local business and community partners. These activities prepare school site teams for success in competitions ranging from banner design to STEM video development to robotic hands, mousetrap cars, and electrical generators design and construction.
- Exploring Computer Science with Code.org. The Code.org program component focuses on teaching students the fundamental concepts of computer science. The curriculum focuses on developing students' computational thinking practices, which include creativity, collaboration, communication, persistence, and problem solving. The Code.org courses blend together unplugged classroom activities with self-guided and

self-paced online tutorials that teach students the basics of computer programming using an easy to learn block-based computer programming language. Student activities seamlessly integrate concepts from other content areas such as reading/language arts, mathematics, science, social sciences, art, and music. In addition, students work with some of their favorite game and cartoon characters from Angry Birds, Plants vs. Zombies, and Disney.

- Girls Who Code. Girls Who Code is a national non-profit organization that aims to close the gender gap in technology. These clubs are expanding nationally to offer computer science education and expose girls in the 6<sup>th</sup> through 12<sup>th</sup> grades to career opportunities available in the STEM field. Groups meet after school throughout the school year and are taught by volunteer instructors who are trained and supported by Girls Who Code staff. The curriculum includes a wide range of skill sets, such as interacting with tech companies and industry leaders through field trips and guest speakers.
- **Making Games K-8.** This component of the AEP helps students create applications, such as interactive games, quizzes, and animations through computer coding.
- Fun with VexIQ Robotics. The goal of the VexIQ Robotics component is to teach coding and collaboration in a fun project-based environment. Students in grades 5-8 design and program their team robot to complete various tasks to earn points in the VexIQ Challenge. They also identify a problem in the community and design a solution that uses science to reduce or eliminate the problem. This component of the AEP promotes logical thinking, persistence, teamwork, research skills, and community involvement. Opportunities to compete with other teams and to share the team project with an authentic audience are included.
- Understanding Money and Finances. The goal of this component is to improve students' financial literacy skills with engaging activities and real-world examples. Using economic simulations and interactive digital tools, students in grades 3-8 explore the world of money through topics such as financial responsibility, money management, savings and investment, and credit and debt management.
- Stimulating Thinking through Chess. The goal of the chess program is to build a strong intellect and improve cognitive ability. Chess promotes logical thinking, reinforces the skills of pattern recognition, and instills a sense of self-confidence and self-worth. Chess also teaches the values of hard work, concentration, objectivity, and commitment.
- Geography/History Bee Competition Preparation and Participation. The goal of the Geography and History Bee Competition Preparation and Participation component is to provide a motivating approach to learning about World Physical and Cultural Geography and U.S. History from the time period of European Exploration to the Civil War and Reconstruction. Program activities include the use of maps, dramatic photographs, fine

art, and expository text to learn about the world's rich geographic regions and cultures and U.S. History. This component encourages students to question, analyze, verify, and evaluate geographic and historic information.

• **Spanish Immersion-Viva el Español.** The goal of this immersion component is to provide students with the opportunity to develop an enriched appreciation of the Spanish language and culture through interactive hands-on activities that incorporate listening/speaking, reading, and writing. Students participate in interactive games, music and movement activities, and arts and crafts. Through these activities, students are exposed to various genres of Spanish literary works, such as stories, poems, and theater productions.

M-DCPS also operates 21<sup>st</sup> CCLCs that provide students with opportunities for academic enrichment, including tutorial services, as well as a broad array of additional services, programs, and activities, such as art, music, recreation, technology education, youth development, and character education programs.

#### Summary

This Information Capsule summarized research findings on the best practices for developing high-quality academic enrichment programs and reviewed research on the impact of participation in academic enrichment programs on students' academic achievement. Researchers have concluded that high-quality academic enrichment programs engage in a number of similar practices, such as complementing (not duplicating) school-day learning, communicating frequently with school-day instructional staff, providing homework support and tutoring, creating a supportive setting for students, and involving families and community partners.

Studies examining the impact of participation in academic enrichment programs on student achievement have reached the following conclusions:

- Participation in academic enrichment programs can lead to increased levels of academic achievement.
- Increases in students' levels of academic achievement are more likely when students attend programs for a longer period of time.
- Students benefit when they participate in a variety of activities.
- Low-achieving students may benefit more from participation in academic enrichment programs than their higher-achieving peers.
- Academic enrichment programs have the potential to increase educational equity.

A sampling of after-school enrichment programs offered in states and school districts across the U.S. is provided. Finally, Miami-Dade County Public Schools' academic enrichment program is summarized.

# References

Afterschool Alliance. (2014a). *America After 3PM: Afterschool Programs in Demand*. Retrieved from <u>http://afterschoolalliance.org/documents/AA3pm-2014/AA3PM\_National\_Report.pdf</u>.

Afterschool Alliance. (2014b). *Afterschool in Action: Promoting Middle School Success Through Innovative Afterschool Programs*. Retrieved from <u>http://afterschoolalliance.org/documents/</u>2014\_MetLife\_Compendium.pdf.

Afterschool Alliance. (2014c). *Taking a Deeper Dive into Afterschool: Positive Outcomes and Promising Practices.* ERIC Document Reproduction Service No. ED557914.

Afterschool Alliance. (2015a). *Afterschool Programs: Inspiring Students with a Connected Learning Approach*. Retrieved from <u>http://afterschoolalliance.org//documents/Afterschool\_and\_Connected\_Learning.pdf</u>.

Afterschool Alliance. (2015b). *Building Literacy in Afterschool.* Dollar General Afterschool Literacy Issue Brief No. 67. Retrieved from <u>http://afterschoolalliance.org//documents/issue</u> <u>briefs/issue building literacy 67.pdf</u>.

Afterschool Alliance. (2015c). *Evaluations Backgrounder: A Summary of Formal Evaluations of Afterschool Programs' Impact on Academics, Behavior, Safety and Family Life.* Retrieved from <a href="http://afterschoolalliance.org//documents/Evaluation\_Backgrounder.pdf">http://afterschoolalliance.org//documents/Evaluation\_Backgrounder.pdf</a>.

Beckett, M., Borman, G., Capizzano, J., Parsley, D., Ross, S., Schirm, A., et al. (2009). *Structuring Out-of-School Time to Improve Academic Achievement*. National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, Washington, DC. Retrieved from <u>http://ies.ed.gov/ncee/wwc/pdf/practice\_guides/ost\_pg\_072109.pdf</u>.

Black, A.R., Somers, M-A., Doolittle, F., Unterman, R., & Grossman, J.B. (2009). *The Evaluation of Enhanced Academic Instruction in After-School Programs*. National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education, Washington, DC. ERIC Document Reproduction Service No. ED506725.

Briggs-Hale, C., Judd, A., Martindill, H., & Parsley, D. (2006). *Afterschool Mathematics Practices: A Review of Supporting Literature.* Mid-Continent Research for Education and Learning, Aurora, CO. ERIC Document Reproduction Service No. ED494268.

Britsch, B., Martin, N., Stuczynski, A., Tomala, B., & Tucci, P. (2005). *Literacy in Afterschool Programs: Literature Review.* Northwest Regional Educational Laboratory, Portland OR. Retrieved from <u>http://www.sedl.org/afterschool/toolkits/literacy/pdf/AST\_lit\_literature\_review.pdf</u>.

California Department of Education. (2015). *After School Education and Safety Program.* Retrieved from <u>http://www.cde.ca.gov/ls/ba/as/</u>.

Charlotte-Mecklenburg Schools. (2016). *After School Enrichment Program.* Retrieved from <u>http://www.cms.k12.nc.us/cmsdepartments/asep/Pages/default.aspx</u>.

Chung, A-M. (2000). *Working for Children and Families: Safe and Smart After-School Programs.* U.S. Department of Education and U.S. Department of Justice, Washington, DC. ERIC Document Reproduction Service No. ED441579.

City of New York. (2016a). COMPASS NYC: The Comprehensive After School System of New York City. Retrieved from <u>http://www.nyc.gov/html/dycd/html/afterschool/compass.shtml</u>.

City of New York. (2016b). *Beacon Centers of New York City.* Retrieved from <u>http://www.nyc.gov/html/dycd/html/afterschool/beacon.shtml</u>.

Coltin, L. (2010). *Enriching Children's Out-of-School Time*. Education.com, March 8, 2010. Retrieved from <u>http://www.education.com/reference/article/Ref\_Enriching\_Out\_School/</u>.

David, J.L. (2011). Research Says . . . / After-School Programs Can Pay Off. *Educational Leadership*, *68*(8), 84-85.

Doyle, A. (2015). After-School Program Offers Continued Education for At-Risk Students. *The Los Angeles Time,* April 15, 2015.

Education Development Center. (2006). *Afterschool Time: Choices, Challenges, and New Directions*. Retrieved from <u>http://www.edc.org/newsroom/articles/afterschool time choices</u> challenges and new directions.

Fleming, N. (2011). After-School Program Offers Enrichment to Pupils. *Education Week, 30*(23), 10-11.

Gardner, M., Roth, J.L., & Brooks-Gunn, J. (2009). *Can After-School Programs Help Level the Academic Playing Field for Disadvantaged Youth?* The Campaign for Educational Equity, Teachers College, Columbia University, New York, NY. Retrieved from <u>http://www.equity</u> campaign.org/i/a/document/11242\_After-school\_report\_10-7-09\_web.pdf.

Goldschmidt, P., & Huang, D. (2007). *The Long-Term Effects of After-School Programming on Educational Adjustment and Juvenile Crime: A Study of the LA's BEST After-School Program.* National Center for Research on Evaluation, Standards, and Student Testing (CRESST), University of California, Los Angeles, CA. Retrieved from <u>http://www.lasbest.org/imo/media/doc/LASBEST\_DOJ\_Final Report.pdf</u>

Green, M. (2014). *Twelve Tips for Integrating Academic Enrichment into Your Afterschool Programs.* Center for the Collaborative Classroom, Emeryville, CA. Retrieved from <a href="http://www.collaborativeclassroom.org/blog/2014/02/05/twelve-tips-for-integrating-academic-enrichment-into-your-afterschool-program">http://www.collaborativeclassroom.org/blog/2014/02/05/twelve-tips-for-integrating-academic-enrichment-into-your-afterschool-program.</a>

Heath, M. (n.d.). *Technology for Afterschool Programs: A Review of Literature and Research Studies.* National Partnership for Quality Afterschool Learning, Austin, TX. Retrieved from <a href="http://www.sedl.org/afterschool/toolkits/technology/pdf/tech\_lit\_rev.pdf">http://www.sedl.org/afterschool/toolkits/technology/pdf/tech\_lit\_rev.pdf</a>.

Herrera, C., Grossman, J., & Linden, L.L. (2013). *Staying on Track: Testing Higher Achievement's Long-Term Impact on Academic Outcomes and High School Choice*. MDRC. Retrieved from <u>http://www.mdrc.org/publication/staying-track-testing-higher-achievement%E2%</u> 80%99s-long-term-impact-academic-outcomes-and-high.

Houston Independent School District. (2016). *After School Programs.* Retrieved from <u>http://www.houstonisd.org/Page/32720</u>.

Huang, D., & Dietel, R. (2011). *Making Afterschool Programs Better*. National Center for Research on Evaluation, Standards, and Student Testing (CRESST), University of California, Los Angeles, CA. Retrieved from <u>http://ostrc.org/doclibrary/documents/MakingAfterschool</u> <u>ProgramsBetter.pdf</u>.

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*. National Center for Research on Evaluation, Standards, and Student Testing (CRESST), University of California, Los Angeles, CA. Retrieved from <u>http://www.cse.ucla.edu/products/reports/R749.pdf</u>.

Huang, D., Cho, J., Mostafavi. S., Nam, H.H., Oh, C., Harven, A. et al. (2010). *What Works? Common Pratices in High Functioning Afterschool Programs Across the Nation in Math, Reading, Science, Arts, Technology, and Homework – A Study by the National Partnership.* National Center for Research on Evaluation, Standards, and Student Testing (CRESST), University of California, Los Angeles, CA. Retrieved from <u>http://hfrp.org/out-of-school-time/ost-database-bibliography/database/common-practices-in-high-functioning-afterschool-programs</u>.

Institute of Education Sciences. (2009). *After-School Math.* National Center for Education Evaluation and Regional Assistance, U.S. Department of Education, Washington, DC. Retrieved from <u>http://ies.ed.gov/ncee/pdf/20094057.pdf</u>.

LA's BEST. (n.d.). Our Programs. Retrieved from http://www.lasbest.org/what/programs.

Lauer, P.A., Akiba, M., Wilkerson, S.B., Apthorp, H.S., Snow, D., & Martin-Glenn, M. (2003). *The Effectiveness of Out-of-School-Time Strategies in Assisting Low-Achieving Students in Reading and Mathematics: A Research Synthesis.* Mid-continent Research for Education and Learning, Aurora, CO. Retrieved from <u>http://www.schoolturnaroundsupport.org/sites/default/files/resources/ostfullsum.pdf</u>.

Lauver, S. (2012). Research: Afterschool and Expanded Learning Programs. *District Administration*, March 2012. Retrieved from <u>http://www.districtadministration.com/</u> article/research-afterschool-and-expanded-learning-programs.

Los Angeles Unified School District Beyond the Bell Branch. (2016). *About Us.* Retrieved from <u>http://btb.lausd.net/About.aspx</u>.

Mazar, C.E. (2012). An Analysis of the Effects of Types of Afterschool Program Participation on Elementary Student Academic Performance. Master's Thesis, Brigham Young University, Provo, UT. Retrieved from <u>http://scholarsarchive.byu.edu</u>.

Miller, B.M. (2003). *Critical Hours: Afterschool Programs and Educational Success.* Nellie Mae Education Foundation, Quincy, MA. Retrieved from <u>http://www.nmefoundation.org/research/time/critical-hours-after-school-programs-and-education</u>.

Missouri Department of Elementary and Secondary Education. (2015). *Afterschool Programs*. Retrieved from <u>https://dese.mo.gov/quality-schools/extended-learning/afterschool-programs</u>.

National Education Association. (2008). *Closing the Gap through Extended Learning Opportunities*. Retrieved from <u>http://www.nea.org/assets/docs/HE/mf PB04 ExtendedLearning.pdf</u>.

New York City Department of Education. (2016). *After School.* Retrieved from <u>http://schools.</u> <u>nyc.gov/StudentSupport/AfterSchool/default.htm</u>.

Office of the Mayor of New York City. (2014). After-School Programs for Middle School

Students. Retrieved from http://online.wsj.com/public/resources/documents/afterschool0303.pdf.

Romash, R.A., White, R.N., & Reisner, E.R. (2010). *Save the Children Literacy Programs: Results from the Comparative Pilot Study, 2009-10.* Policy Studies Associates, Inc., Washington, DC. Retrieved from <u>http://research.renaissance.com/research/413.asp</u>.

SEDL. (n.d.). *About Academic Enrichment in Afterschool.* Retrieved from <u>http://www.sedl.org/</u><u>afterschool/toolkits/about\_toolkits.html?tab=arts</u>.

Stiegelbauer, S. (2008). *The Arts and Afterschool Programs: A Research Synthesis*. National Partnership for Quality Afterschool Learning, Austin, TX. Retrieved from <u>http://www.sedl.org/</u><u>afterschool/toolkits/arts/pdf/arts\_lit\_rev.pdf</u>.

Texas Education Agency. (2013). *Texas 21<sup>st</sup> Century Community Learning Centers: Year 2 Evaluation Report*. Retrieved from <u>http://tea.texas.gov/Texas Schools/Support for At-Risk\_Schools\_and\_Students/21st\_Century\_Community\_Learning\_Centers/</u>.

Texas Education Agency. (2016). *Afterschool Centers on Education*. Retrieved from <u>http://www.texasace21.org/</u>.

U.S. Department of Education. (2016). 21<sup>st</sup> Century Community Learning Centers. Retrieved from <u>http://www2.ed.gov/programs/21stcclc/index.html</u>.

Vandell, D.L., Reisner, E.R., & Pierce, K.M. (2007). *Outcomes Linked to High-Quality Afterschool Programs: Longitudinal Findings from the Study of Promising Afterschool Programs.* University of California Irvine, University of Wisconsin – Madison, and Policy Studies Associates, Inc. Retrieved from <u>http://www.nccap.net/media/pages/\_NDLHIIIPromisingPractices</u> <u>Reportfinal1.pdf</u>.