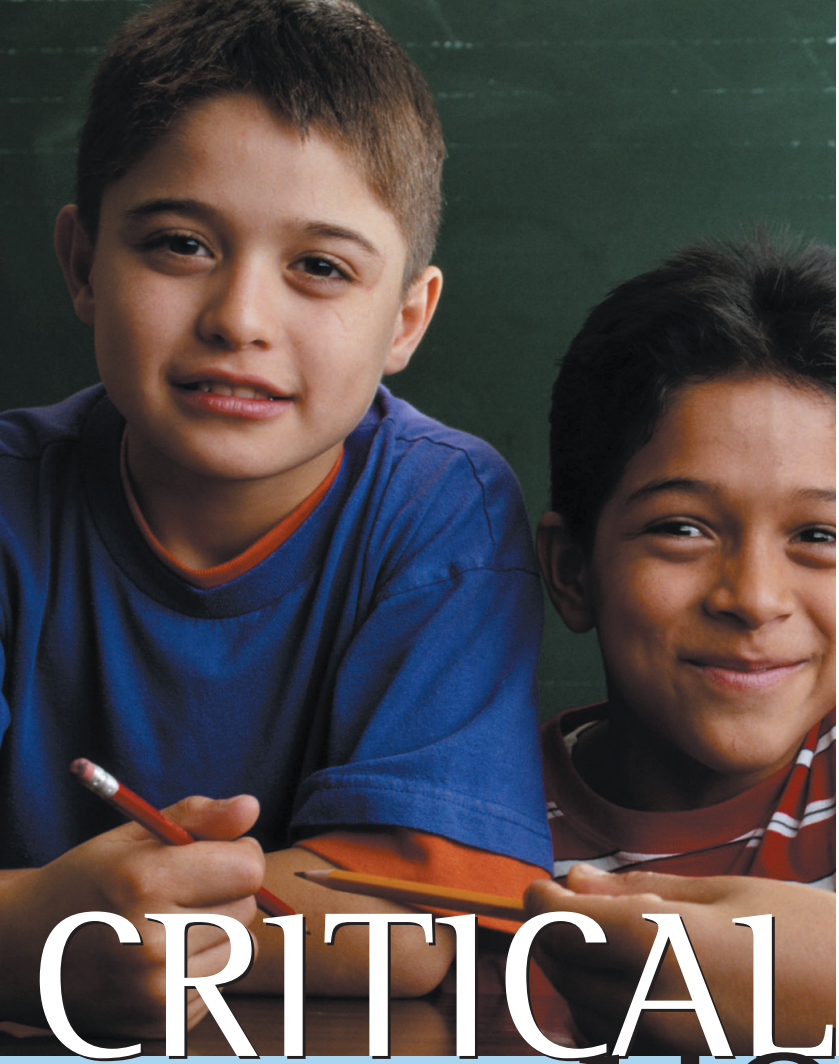

Afterschool Programs and Educational Success

CRITICAL HOURS

EXECUTIVE SUMMARY

By Beth M. Miller, Ph.D.

Commissioned by the Nellie Mae Education Foundation

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All errors and omissions are the sole responsibility of the author.

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Message from Blenda J. Wilson

The Nellie Mae Education Foundation is pleased to announce the release of *Critical Hours: Afterschool Programs and Educational Success,* a review of the research literature by Dr. Beth M. Miller, a national expert in this emerging field. In these times of intense public interest in improving public education, educators, parents and policymakers are seeking better ways to help students learn. Increasingly, afterschool programs are viewed as promising venues to increase student engagement in learning and to improve their academic performance.

Because young people spend only 20% of their time in school, how and where they spend the remaining 80% has profound implications for their well-being and their future. Quality afterschool programs provide engaging learning activities in a safe and supportive environment. These programs can meet students' needs for personal attention from adults, inclusion in positive peer groups, and enjoyable experiential activities that build self-esteem. Afterschool programs are also uniquely positioned to encourage a more supportive bridge between home and school.

Critical Hours: Afterschool Programs and Educational Success makes a case for the valuable role afterschool programs can play in convincing young people that learning can be fun and to think of themselves as capable learners. Although the report focuses on the middle school years, a time when many students experience a marked decrease in school engagement, it is a resource to anyone who is interested in knowing why and how effective afterschool programs work.

We hope *Critical Hours* will stimulate informed dialogue among parents, educators and policymakers about investments in afterschool programs. We believe the report will help afterschool providers improve ongoing programs, more assured that what they do helps young people develop skills that are essential for success in today's world.

For a copy of the full report, please go to the Nellie Mae Education Foundation's website: www.nmefdn.org.

Introduction

Critical Hours explores the links between out-of-school time and positive development, particularly during early adolescence, paying special attention to the role of afterschool programs in promoting learning. What role can these programs play in helping young people navigate adolescence and its academic challenges to successful adulthood? Why do some students do well in school, while others struggle to achieve and still others don't even try? What motivates young people to succeed? What helps them think of themselves as learners and achievers? This report argues that afterschool programs can make a difference in building the "prerequisites" to learning, supporting not only school achievement, but long-term competence and success as well.

A single study cannot prove definitively that afterschool programs benefit youth, families and communities. However, the accumulation of research findings presented in *Critical Hours: Afterschool Programs and Educational Success* makes an extremely compelling case that many young people derive great benefit from afterschool programs and extracurricular activities.

The Evidence is In: Afterschool Programs Make a Difference

Afterschool programs keep young people safe and out of trouble [5-15], but they can do much more. Participants in good afterschool programs develop interests and skills that stay with them throughout their lives. Many studies conducted over the past two decades point to the links between afterschool program participation and educational success, including:

- **Greater Engagement in Learning:** Improved behavior in school; increased competence and sense of oneself as a learner; better work habits; fewer absences from school; higher educational aspirations and improved attitudes toward school; better emotional adjustment and relationships with parents; greater sense of belonging in the community; better use of time [2, 7, 10, 16-28]. One study found that low-income third,

fourth and fifth graders who attended afterschool programs had better work habits, emotional adjustment and relationships with peers than those who did not attend programs [17]. Youth who participated in Boys and Girls Clubs' Educational Enhancement Program reported enjoying tutoring and reading and writing more, as well as enjoying talking to adults more even 30 months after entering the program [7].

- **Higher Academic Performance**: Improved homework completion and quality, improved grades, higher scores on achievement tests, and reductions in grade retention [2, 7, 10, 18, 22, 26, 29-31]. Evaluators of the $10 million expansion of afterschool programs in Ohio found that children missed fewer days of school, completed more homework assignments, and performed better on fourth and sixth grade proficiency tests [10]. Students in California's LA's BEST program had fewer school absences and performed better than peers on standardized math, reading and language arts tests. In addition, bilingual children in the program gained English proficiency faster than their peers [2].

Young people aren't the only ones to benefit from

Afterschool Program Models

- School-age child care came into its own during the 1980's, growing out of a child care movement designed to meet the needs of working families. These programs typically provide a range of activities, allowing children a fair amount of choice from day to day. Historically, school-age care programs have served children in the early elementary grades (13), but middle school programs have become increasingly common over the past decade.

- Positive youth development evolved from adolescent prevention programs of the same era. Recognizing that the deficit-oriented model of drug abuse or pregnancy prevention has limited effectiveness, advocates of this approach work with young people to build on their assets and engage them in their communities. Many different types of programs embrace positive youth development, from community centers and Boys & Girls Clubs that offer a variety of activities to programs for teens who have specific interests, needs or talents.

- Extended day programs are designed to increase students' academic success. They are often run by schools and may serve students of any age, often focusing on those in the grades subject to high-stakes testing. Although the goal is clear, educationally oriented afterschool programs may use a range of strategies, including remediation, enrichment and experiential education.

- Extracurricular activities encompass a wide range of lessons, team sports and clubs that bring young people together with adult teachers and coaches.

quality afterschool programs; positive effects extend to families, employers and communities as well. Working parents who know their children are in a safe, secure place supervised by adults during out-of-school time are able to be more productive, work more hours, and move into better jobs [10, 32]. Lower juvenile crime rates mean lower police protection and security costs. The link between participation in out-of-school time programs and better academic performance can also result in fewer grade retentions, which translates into higher graduation rates and lower costs for special needs services [2, 11, 33-35]. In California, Brown and his colleagues recently estimated a savings of between $8.90 and $12.90 for every dollar spent on the new Proposition 49 state-funded afterschool program [33].

What The Research Tells Us

Early adolescence is a fragile period – one of fast-paced physical and emotional growth coupled with greater freedom, presenting young people with choices that can lead them down difficult paths. The programs, structures and institutions that currently exist in American society are not sufficient to help many young people reach their potential [36]. Parents are busy making ends meet. Schools are not structured to accommodate the needs of middle school students [37, 38]. And the streets are often dangerous [39, 40]. Although there aren't any easy answers, this report suggests that afterschool programs have an important role to play in helping students increase their academic achievement and promoting healthy development in critical areas.

Programs must fit the interests, values and norms of students from diverse cultures. They must be less formal than school. To achieve positive outcomes, programs must also find ways to expose young people to the world beyond their immediate experience; to raise their expectations of themselves and their ability to make their lives better, as well as improve the communities they live in. When programs succeed, students have increased motivation to achieve academically and the skills they need to realize their goals.

We know that all programs are not equally effective, and that young people respond differently

depending on their individual personalities, talents, resources, and needs. A few hours a day in an afterschool program is not likely to compensate for a poor quality education or years of alienation from school culture and expectations. However, based on the wide body of research analyzed for this report, we conclude the following:

1) Youth benefit from consistent participation in well run, quality afterschool programs.
2) Afterschool programs can increase engagement in learning.
3) Afterschool programs can increase educational equity.
4) Afterschool programs can build key skills necessary for success in today's economy.

1) Youth benefit from consistent participation in well-run, quality afterschool programs.

We know that young people benefit from participation in effective afterschool programs. When they attend a high quality program that meets their needs over a significant period of time, youth can increase their social competence, academic performance and civic engagement.[1] In study after study, participants who gained the most are those who face the greatest odds in our society – low income youth, students from non-English speaking families, students who do not perform well in school, and those who live in chaotic, dangerous neighborhoods [17, 18, 25, 43]. In spite of recent growth in the field, however, studies find that those youth who are most in need continue to have very limited access to effective programs [44, 45].

1 Not surprisingly, evaluation of programs that are of low or unknown quality, or are attended by children over a short time or for only a few hours a week, have not always documented these benefits [41,42].

Research Snapshot

Compared to a sample of 254,400 youths in grades 5-12 [3], participants in New York's 4-H program had:

- higher educational aspirations
- higher achievement motivation
- greater desire to help others
- higher self-esteem
- better decision-making skills
- higher level of interaction and communication with adults
- better ability to make friends

Students who participated for one year or more had significantly higher scores on developmental assets than those who had been in the program for a shorter period.

Positive outcomes are linked to participation levels: students who demonstrate increases in their performance not only enroll, but also attend for months and often years [e.g., 2, 18, 30, 46]. Activity-based programs a student attends only once or twice a week over the course of a single semester are unlikely to produce long-term effects. Similarly, programs that don't appeal to early adolescents won't attract or retain them long enough to influence their development.

2) Afterschool programs can increase engagement in learning.

Many students experience a marked decrease in school engagement during the middle school years – grades falter; self-esteem, interest in school and confidence in academic abilities declines; and truancy increases [37, 47-50]. Students who are alienated from school also score lower on psychological adjustment assessments, are more likely to act out aggressively, are far more likely than their peers to use alcohol and drugs and become sexually active at an earlier age, and are more likely to commit crimes [51-53].

On the other hand, students who are engaged in learning take interest in their schoolwork, make an effort to earn good grades, and attempt to master subject matter on their own before requesting assistance. Afterschool programs can increase engagement in learning by providing middle school students with opportunities to meet needs that schools often can't, e.g., personal attention from adults, a positive peer group, and activities that hold their interest and build their self-esteem [54-61]. They can also create a bridge or "border zone" between the culture of peers, family and community, and the school environment [62, 63].

Research Snapshot

LA's BEST serves 18,000 students in 105 schools. Ongoing evaluations[2] have found:

- 83% of students say they like school more as a result of program participation.
- Students who participated regularly over several years scored higher on standardized tests in mathematics, reading and language arts into their high school years.
- 98% of children feel that LA's BEST staff care about them and have high hopes for their success.
- Teachers report that participants have better attitudes and communication skills.
- Grade-point averages in math, science, social studies, reading, and writing increased from between 24% and 32% after the second year in the program.

3) Afterschool programs can increase educational equity.

Race, class and ethnicity remain powerful predictors of school achievement [43, 64]. Despite 40 years of education reform [65, 66], the achievement gap – the differences in school performance between rich and poor children, between children in affluent communities and those living in poor communities, and between white children and Asian-American on one hand, and African-American and Latino children on the other – persists.

No single factor causes the achievement gap; it is a result of complex individual, family and social circumstances [64, 66-73]. However, research suggests that many of the circumstances linked to poor achievement, e.g., low expectations by teachers, students' alienation from school, lack of enrichment activities, and poor quality education may be ameliorated, at least in part, through participation in out-of-school time programs [53, 72, 74-78]. These programs are a promising strategy for providing disadvantaged young people with: 1) learning opportunities and experiences that are available to most middle and upper class students; 2) experiences that broaden their horizons, build on their interests and skills, facilitate positive relationships with adults and peers; 3) and link to classroom expectations.

We know that when disadvantaged young people are engaged in the range of extracurricular activities, programs and summer camps readily available to children in affluent communities, they are likely to benefit [4, 79-83].

4) Afterschool programs can build skills necessary for success in today's economy.

A high school diploma and skills in numeracy and literacy are prerequisites for a decent job today. Murnane and Levy [84] point out, however, that these are only two of the basic skills needed for success. Soft skills – teamwork, problem-solving

Research Snapshot

In a national study of 10th graders, students in higher income families were twice as likely to spend 5 or more hours per week in extra-curricular activities compared to students from lower income families [4]. Those students who spent no time in extracurricular activities, compared to peers who spent 5-19 hours per week, were:

- 6 times more likely to have dropped out of school by their senior year
- 3 times more likely to be suspended in their sophomore or senior year
- twice as likely to be arrested by senior year
- about 75% more likely to smoke cigarettes or use drugs as sophomores or seniors

and communication skills – are equally important and rank high on employers' lists of necessary qualifications, even for front-line and entry level jobs in today's economy. At the same time, teachers must intensify their focus on the academic competencies measured by today's high-stakes standardized tests, resulting in less time and fewer resources devoted to "soft" skills that matter just as much, in the long run, but are not the subject of accountability measures [61, 62].

How can afterschool programs play a role in righting this imbalance? They can offer tutoring and additional time for students who need to work on English and math skills, and a quiet, well-resourced space to do homework after school. Programs can also offer intangibles that may be even more valuable – the opportunity to engage in activities that help young people realize they have something to contribute to the group; the opportunity to work with diverse peers and adults to create projects, performances and presentations that receive accolades from their families and the larger community; and the opportunity to develop a vision of life's possibilities that, with commitment and persistence, are attainable.

Research Snapshot

Top 10 qualities employers look for in college graduates[1]:

- Verbal and written communication skills
- Honesty and integrity
- Teamwork skills
- Interpersonal skills
- Motivation and initiative
- Work ethic
- Analytical skills
- Flexibility and adaptability
- Computer skills
- Organizational skills

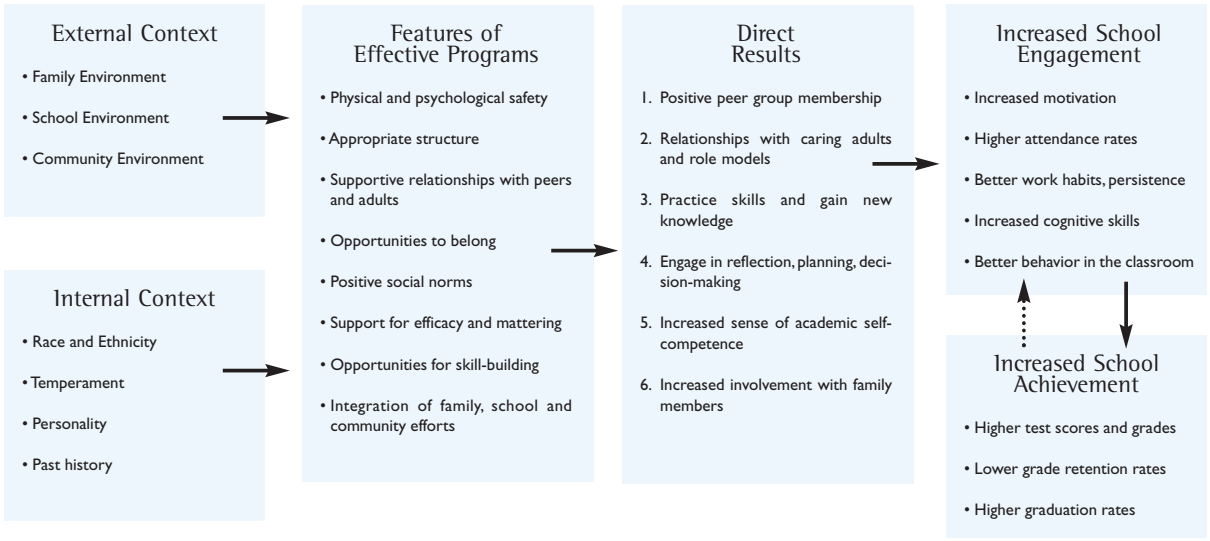
How Afterschool Programs Work: Theories of Change

A theory of change describes how program activities are expected to lead to outcomes for participants. Theories of change can be helpful in depicting the underlying assumptions about how things connect, allowing us to test ideas to determine if the theory works. The theory proposed in this report addresses the question: How does participation in afterschool programs promote learning?

Based on work by James Connell and others [85, 86], we subscribe to a theory of change describing how afterschool programs can result in increased academic success for students. How students spend their time after school can affect their engagement in learning, resulting in better school performance. Where children spend out-of-school time can determine the kind of activities they participate in. For example, latchkey children are more likely to watch television in the afternoon than children engaged in an afterschool program [17]. Different activities have different effects on engagement in learning, which in turn affects school performance [17, 79, 87].

The graphic below specifies features of effective programs and the direct results of intentional programming. Afterschool programs can help early adolescents build attitudes and behaviors associated with engagement in learning that are likely to transform into actual changes in performance over time.

Theory of Change



Quality afterschool programs promote school success by meeting the social, emotional, cognitive, and physical needs of early adolescents. Young people yearn for a sense of belonging and the feeling that they are competent in areas that are meaningful both to them and others. Through program participation, young people can:

- Build meaningful relationships with adults outside their family and acquire positive role models [47, 54, 60, 61]
- Engage in activities that enable them to learn new things and use knowledge gained in school [61, 88]
- Engage in reflection, planning, decision-making, and problem-solving [47, 63, 75]
- Belong to a group of peers who have positive aspirations [47, 79, 89-91]
- Find a "border zone" between the cultures of home and school that provides them with access to mainstream society, at the same time respecting their identity [63, 75]
- Transfer positive experiences in a school-based program to more positive feelings about school itself [2, 18, 21]
- Increase the sense of themselves as learners [28, 47, 91-93]
- Increase the involvement of family members in their lives [47, 94]

Different Program Approaches, Common Features

To understand the elements of effective programs, we examined recent research responses to the following questions:

- Why are some programs beneficial while others seem to have no perceivable effect?
- Which program features – staff, facility, curriculum, structure, mission, administration, location – work best for middle school students?

- How do the characteristics of participating students affect program outcomes?

Out-of-school time is a relatively new field that encompasses a wide variety of programs. It is not surprising, therefore, that the research conducted thus far is modest but growing. Much of what we know about effective programming is due to the efforts of a number of national organizations and citywide initiatives to synthesize years of empirical experience and professional consensus into formal standards and checklists [e.g., 95, 96-99]. Recently, a two-year study by the National Research Council's Committee on Community-Level Programs for Youth [100] resulted in a research-based compendium that highlights the following eight features of positive developmental settings:

1.) Physical and Psychological Safety

2.) Appropriate Structure

3.) Supportive Relationships (e.g., explicit mentoring or implicit program design for extensive one-to-one, or small group connections between young people and adults)

4.) Opportunities to Belong

5.) Positive Social Norms

6.) Support for Efficacy and Mattering (i.e., opportunities for autonomy, challenge and taking responsibility)

7.) Opportunities for Skill Building

8.) Integration of Family, School and Community Efforts

Many programs strive to incorporate program features like those listed above. To attain them, programs must have capable, resourceful, energetic staff; program content that builds

on early adolescents' interests and helps them reach their highest potential; and an administration that can provide a stable, adequately funded structure to nourish the program over time. To meet these goals, afterschool programs must surmount an array of barriers – from rapid turnover of poorly compensated staff to inadequate facilities and transportation. Most programs today also face the challenges inherent in harnessing out-of-school time to meet demands for enhanced academic performance.

A comprehensive review of all of the approaches utilized by afterschool programs is beyond the scope of *Critical Hours*. However, the full report reviews the effects of some of the most commonly pursued program strategies:

- experiential and adventure education
- service and project-based learning
- arts education
- mentoring and tutoring

All of these approaches can develop and engage early adolescents' interests, bringing them "through the door." Effective programs strive to meet young peoples' need to experience success and competence, as well as develop healthy relationships with adults and peers, and a rich variety of skills, positive attitudes and behavior [101-111].

Critical Hours also examines three of the most common approaches to enhancing the academic impact of programs – homework time, linkages with the school day and literacy development:

- **Homework Help** - Although research suggests that homework has little or no effect on middle school students' academic performance [112-114], most students are experiencing increasing homework loads, which means afterschool programs must contend with this issue. Afterschool programs can also help to address the socio-

economic inequities that homework can exacerbate, including differences in access to computers, adults who can help with assignments, and spaces conducive to study, [112]. Homework help, a staple of nearly all afterschool programs, can mean anything from a designated table in the middle of many other activities to one-on-one attention from a teacher on a regular basis [115-117].

- **Linking to School** - Although creating linkages between in-school and afterschool programs is a common goal, most programs have great difficulty in achieving it. Differences in institutional cultures, instructional orientation and schedules, coupled with challenges related to staff turnover and poor communication can hinder linking in-school time with afterschool programs [45, 118].

  Children in any particular afterschool program commonly come from different classrooms, grade levels and schools, making connections between in-school and afterschool staff even more difficult. One promising strategy is to cross staffing boundaries, i.e., hire school teachers and paraprofessionals to staff afterschool programs, while schools hire teachers and staff with past experience in afterschool programs [32, 119].

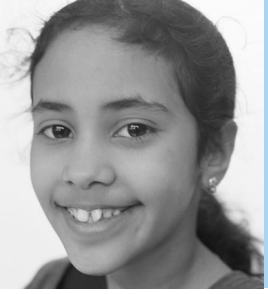
- **The Literacy Connection** - Being able to read and write is the key to success in nearly every subject. Poor literacy skills are linked to a host of negative outcomes for youth – from unemployment and dropping out of school to crime and delinquency. Consequently, many programs strive to help young people develop good literacy skills. Programs serving middle school students may engage them in reflection and group discussions; bring in trained tutors; offer family literacy activities, board games, structured book discussions, homework and independent study time; and integrate literacy skill-building with technology and the arts [115, 120, 121]. Too often, however, a lack of qualified staff, materials and resources; poor communication with school teachers; and limited administrative support creates challenges for many programs [120].

Summary

Afterschool programs are uniquely poised to help young people see themselves as learners in an informal, hands-on learning environment. They can bring parents, schools and the community together. They can create the foundation for a positive peer culture that values learning skills and contributes to society.

To engage early adolescents who are seeking identity and independence, effective programs must find ways to compete with the streets and the mall. They must help youth overcome the effects of poverty, racism, isolation, and negative media influences, as well as support those whose parents are working ever-longer hours to make ends meet. Out-of-school time programs operate in the context of increasing pressure to help students achieve test-based academic outcomes.

The good news is we know what works and why. *Critical Hours* points to the importance of communities, school systems and government working together to overcome barriers to effective programs in order to provide young people with experiences that contribute to their development, safety and academic achievement.



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