

Afterschool  
Programs  
and  
Educational  
Success

# CRITICAL HOURS



By Beth M. Miller, Ph.D.  
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Nellie Mae Education Foundation

# Critical Hours:

Afterschool Programs and Educational Success

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## Table of Contents

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<b>I. Introduction</b>	1
<b>II. Early Adolescence in Context</b>	3
Table 1- Risks Faced by Adolescents	3
The Family Context	7
The Media Context	8
The Economic Context	9
The Educational Context	10
The Achievement Gap	11
Table 2 - Why Do We Have An Achievement Gap?	12
Summary	14
<b>III. Engagement in Learning</b>	15
What Promotes Engagement in Learning?	18
A Sense of Oneself as a Competent Learner	19
Involved Parents	20
Emotional Attachments to Caring Adults	21
Positive Peer Influences	22
Summary	24
<b>IV. The Landscape of Afterschool Programs</b>	24
School-Age Care	25
Positive Youth Development	26
Extended Learning	28
Extracurricular Activities	28
Table 3 - Prototypes of Afterschool Programs	29
Access to Opportunities	30
Summary	31
<b>V. What To Do After Two P. M.</b>	32
Self-Care: A Risky Situation?	33
Outcomes of Extracurricular Activities	36
Comparing Different Uses of Out-of-School Time	38
Summary	39
<b>VI. Outcomes of Afterschool Programs</b>	39
Toward a Theory of Change	40

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

Figure 1 - Theory of Change (A) . . . . .	41
Figure 2 - Theory of Change (B) . . . . .	42
Figure 3 - Theory of Change (C) . . . . .	43
Formal Afterschool Programs . . . . .	46
Table 4 - Outcomes of Formal Afterschool Programs . . . . .	47
Programs for Elementary School Students . . . . .	48
Middle School Programs . . . . .	53
Table 5 - Results of Participation in Afterschool Programs . . . . .	55
Who Benefits? . . . . .	57
Summary . . . . .	59
<b>VII. Program Strategies . . . . .</b>	<b>60</b>
Experiential Education . . . . .	60
Project-Based Learning . . . . .	61
Adventure Education . . . . .	62
Service Learning . . . . .	63
Mentoring and Tutoring . . . . .	63
Arts Education . . . . .	65
Summary . . . . .	67
<b>VIII. Implementing Effective Programs . . . . .</b>	<b>68</b>
Homework . . . . .	73
Links to the School Day . . . . .	74
Literacy Development . . . . .	76
Challenges to the Field . . . . .	78
Summary . . . . .	81
<b>IX. Critical Hours . . . . .</b>	<b>82</b>
Appendix A - A Brief Summary of Resiliency Research . . . . .	84
Appendix B - Challenges to Evaluation of Afterschool Programs . . . . .	85
Table 6 - Types of Program Evaluation . . . . .	87
What Should Programs Be Held Accountable For? . . . . .	88
References . . . . .	91
About the Author . . . . .	119

## 1. Introduction

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If I had to choose between keeping all of my school learning or keeping all of my outside of school learning, I would not hesitate a moment: goodbye, school learning (student quoted in Wolk, 2001, p. 56).

What are the most influential experiences of your youth, the things that helped you become who you are today? If you are like most people, you are unlikely to respond with descriptions of time you spent in school. More likely, you will think about your life outside of school—the woods you explored with neighborhood kids, the youth worker at the Boys and Girls Club who encouraged you to dream, that time you had a big role in the school play, the teacher who tutored you after school and came to your basketball game. People, places and activities: these are the building blocks of development.

This report examines the effects of out-of-school time on children during a fragile, hectic and often neglected period of development: early adolescence, spanning the years from 10 to 14. During these middle school years, children go through dramatic physical, emotional and cognitive changes, transitions that translate into new potential as well as new risks (Dryfoos, 1990; Jackson & Davis, 2000).

What role can afterschool programs play in helping young people navigate early adolescence to successful adulthood? In the following pages, we will explore the links between out-of-school time and success, especially for early adolescents. We will combine knowledge gleaned from education, psychology, child development, recreation, and other areas to create a picture of afterschool programs today, paying special attention to the role programs can play in promoting students' academic success.

Some children can benefit from spending additional time developing skills in numeracy and literacy either during or after school. However, research indicates that increasing young people's involvement in enrichment activities can be an even more effective long-term strategy

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

for building academic success (Broh, 2002; Cairns, 1995; Campbell, Storo & Acerbo, 1995; Childress, 1998; Cooper, Valentine, Nye, & Lindsay, 1999; Eccles & Barber, 1999; Gerber, 1996; Viadero, 2002). Afterschool programs can play a key role in engaging youth in the learning process by providing opportunities to explore interests, gain competency in real world skills, solve problems, assume leadership roles, develop a group identity with similarly engaged peers, connect to adult role models and mentors, and become involved in improving their communities. 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.

We begin this report with a brief overview of early adolescent development in the present educational, economic and social contexts, and go on to review the major attitudes and behaviors associated with academic achievement. When young people are engaged in learning, they do better in school. What helps students become motivated to succeed? What factors or experiences encourage a student to think of himself as a learner? What helps her build skills in planning projects and reflecting on their success? If afterschool programs can make a difference in these important factors, they will not only support school achievement, they will support lifelong success as well.

Once we have examined the “prerequisites” for school success, we will examine afterschool programs. What is the potential role of afterschool programs in promoting academic success? Through a review of relevant theories, developmental research studies, program evaluations, and studies on the effects of extracurricular activities, we create a picture of the potential links between program participation and school learning. Finally, we address the question: What are the components of effective afterschool programs that promote students’ academic success over the long run? Are there important factors programs should take into account? Although more research needs to be conducted and much remains to be learned, the evidence is clear: afterschool programs can be powerful vehicles for early adolescent development.

However, the existence of a program in no way guarantees positive results for children.

Good outcomes require good programming, which is not easily achieved in a field as undeveloped and under resourced as afterschool programs currently are. Although some organizations and a number of citywide afterschool initiatives have developed program quality standards (e.g., City of Philadelphia Office of Children’s Policy, 2001; Mayor’s Office of Education, 2000; National School-Age Care Alliance, 1998; Safe and Sound Campaign, 1999), desired outcomes vary dramatically from one program to another, as do the means used to reach these goals. While there is general consensus that afterschool shouldn’t look like “more school,” there is far less clarity about what should occur during the many hours young people are not in school.

## II. Early Adolescence in Context

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Early adolescence is a time of dramatic change in every area of a young person’s life. During this period, young people forge personal identities in a context of physical and emotional changes, the increasing importance and influence of a peer group, and growing independence. It is the confluence of change on many levels—biological and physiological growth, peer and social expectations, and the school environment—that can make early adolescence a particularly risky period (see Table 1) (Lerner, 1993a; Solodow, 1999; Weissberg & Greenberg, 2000).

Table 1 - Risks Faced by Adolescents

According to a recent report by the National Research Council (National Research Council, 2002), major risks of adolescence include:

- Alienation from parents due to difficulties in renegotiating the child-parent relationship
- Getting involved in behaviors and circumstances that endanger their ability to make a successful transition to adulthood due to the influence of a peer group

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

- Lack of social connections to adults and institutions that will support their development
- Educational experiences that fail to provide the “hard” and “soft” skills adolescents need for successful future employment
- Lack of development of motivation or skills to get involved in the community
- Alienation from mainstream society due to experiences of racism, prejudice and cultural intolerance

Physical changes during early adolescence extend beyond puberty. There are also changes in brain function during this time. The areas of the brain responsible for planning and self-control go through their greatest change between puberty and young adulthood (National Research Council, 2002). Children’s ability to think abstractly and hypothetically increases during this period. The ability to process new information and solve problems does not develop simply as a result of maturation, however. Brain development is dependent on constant experience in practicing and applying cognitive skills in new situations (Shore, 1997).

During early adolescence, young people are “exquisitely sensitive to peers and peer group sentiment (Entwisle, 1990, p. 205).” In their quest for an independent identity, young adolescents experience an increased need for belonging with a peer group, typically spending less time with family and more with friends (Halpern-Felsher et al., 1997). Harter (1999) notes that confidence in social acceptance is a more important predictor of self-esteem for adolescents than confidence in academic competence. The strength of peer influence can lead to distinct changes in a youth’s school performance, self-perception and behavior with adults. Peer influence generally increases over the years of early adolescence. Moderated by connections with parents and other adults, peer influence can have either a positive or negative effect on social and academic behavior (Brown, Steinberg, Mounts, & Philipp, 1990; Peng & Wright, 1994; Quane & Rankin, 2001).

Early adolescents are seeking more responsibility, a sense of identity, increased independence and autonomy, and experience in the real world. They will find ways to achieve these goals, whether through socially approved (e.g., school leadership) or oppositional (e.g., gang membership) avenues. Developmental characteristics like heightened self-consciousness, concern with comparison to others, and a focus on relationships with peers bring the potential for harm (Scales, 1996). Young people who can't find success in a healthy, pro-social environment will be susceptible to experiences that lead to long-term failure (Blum, Beuhring & Rinehart, 2000; Maggs, Almeida & Galambos, 1995; Quane & Rankin, 2001). School achievement is both a cause and effect of these choices. As early adolescents find their group of peers ("brains," "jocks," "freaks," etc.) and have experiences that either develop or hinder their identity as competent learners, attitudes toward learning can be hardened into a mold that will be difficult to change in the years ahead.

While all adolescents face the same developmental tasks, all do not have the same probability of navigating to a successful adulthood. Young people who grow up in poverty are more likely to suffer chronic health problems, be exposed to violence, receive a poor quality education, and live in a dangerous neighborhood (Children's Defense Fund, 2000; Lerner, 1993b). Low-income children are also less likely to have significant adults in their lives to help them through (Galbo, 1986).

As important as race, ethnicity, family structure, parent education, and socioeconomic status are in our society, these background characteristics serve merely as indicators of the factors that affect the process of growing up (Blum et al., 2000; Putnam, 2000; Quane & Rankin, 2001; Rankin & Quane, 2002; Resnick et al., 1997). Statistical correlations often take on the aura of causal facts, but they are only signs of underlying processes. Studies that compare "structural" differences like income, education, and family structure with "process" factors like engagement in school and relations with parents find that the latter are much more powerful predictors of risky behavior.

The stereotypes don't always fit. Suburban high school students have higher levels of reported

stress and substance use than their urban peers (Luther & Becker, 2002). At the same time, African-American and Latino children, who are much more likely to be poor than white children, face the additional challenges of responding to racism in our society. Successful black and Latino youth are often bicultural, i.e., able to function in both home and mainstream cultures. They must maintain the strong personal identity that is key to psychological health and, at the same time, find ways to meet the expectations of the mainstream educational system. In adolescent subgroups where academic success is interpreted as “acting White,” a youth may be faced with a choice between alienation from his own peer culture and successful achievement in the larger society (Ogbu, 1992).

Young people can also be at risk of poor developmental outcomes due to characteristics of the larger community. Especially as they reach adolescence, the academic outcomes of young people are affected by the characteristics of their neighborhood, including joblessness, income and social cohesion (Connell, Aber & Walker, 1995; Halpern-Felsher et al., 1997; Putnam, 2000; Sampson, 1997; Wilson, 1987). Regardless of income, neighborhoods with strong “collective efficacy”—where members look out for one another’s children, socialize informally, participate in civic organizations, and help each other with daily tasks—promote higher social competency and academic performance among youth (Putnam, 2000; Quane & Rankin, 2001; Rankin & Quane, 2002). The lack of youth facilities and programs in inner city neighborhoods prevents young people from what Putnam (2000) terms “bridging social capital.”

By providing opportunities for youth to engage with peers and adult role models, youth service organizations help engender the transfer of external assets or linkages to resources which may be beyond the means of family members but which are crucial to “getting ahead”...families residing in resource-depleted neighborhoods lack the opportunity to expose their children to the normative influences of formal institutions and the positive role models who are affiliated with them (Quane & Rankin, 2001, p. 3).

Inner city and rural environments have child poverty rates much higher than those of suburban areas. Most chronically poor counties in the U.S. are in rural areas, particularly in Appalachia

and the southern states. In rural and urban settings, youth face widespread unemployment combined with limited access to educational and out-of-school time resources, and social and health services (Chung, Coquillette, Dizon, & Kovanda, 1998). In addition, urban youth often face issues of substance abuse and violence, while rural youth contend with isolation.

In high crime neighborhoods, young people may be easy targets for recruitment into gangs or other delinquent activities: they are seeking the status, sense of identity and peer approval that a gang offers. Whether they live in inner city or rural environments, low income adolescents have much less access to enriching, developmentally supportive opportunities during out-of-school time (Littell & Wynn, 1989; Quane & Rankin, 2001; Zill, Nord & Loomis, 1995) than children in more affluent communities.

During the past decade, increasing attention has been given to the differential changes in emotional development for girls and boys during early adolescence. The self-esteem and academic achievement of young girls often declines during this period (Eccles & Midgley, 1989; Rothenberg, 1995). One interpretation of this phenomenon is that girls become acutely aware during early adolescence of the power imbalance between the genders in society, and relate to it on a personal level for the first time (Gilligan, Lyons & Noel, 1990; Orenstein, 1994). In addition, middle school girls, especially Caucasians, compare themselves to the media images of feminine beauty, resulting in poor ratings of their own physical appearance (Erkut, Marx, Fields, & Sing, 1998). White, middle class girls appear to be more likely to experience a drop in self-esteem and achievement during the transition to adolescence, especially girls who subscribe to traditional feminine sex roles (American Association of University Women, 1991; Erkut et al., 1998).

### ***The Family Context***

Parents are no less caring or committed to their children's success today than they were in bygone eras, but a lack of time and money make it increasingly difficult to secure it. The work hours of the average parent have increased significantly (Schor, 1993). American workers currently work longer hours than those in any other industrialized country. Employees in the

U.S. also have far fewer vacation days than workers in other countries. More mothers are in the workforce, and more are employed full-time and year-round (Weissberg & Greenberg). With the advent of welfare reform, many more poor mothers have entered the labor force.

Although many lower income parents joined the workforce, they did not reap the financial benefits of the decade-long economic expansion that increased the wages of highly skilled workers. Lower income parents are typically in jobs that do not provide health benefits, the right to take time off to care for sick children, or paid vacation. In fact, although the welfare rolls fell precipitously, the poverty rate among working single mothers did not decline between 1995 and 1999 (Porter & Dupress, 2001). Recent research documents the “double bind” faced by low-income working mothers, who have neither the time nor the financial resources to care properly for their children or help them meet the stringent new academic testing requirements (Chin & Newman, 2002; Heymann, 2000; McCrate, 2002).

Early research focused on the effects of welfare reform on younger children; many of these studies found positive effects, especially on children’s cognitive skills at the point of school entry. However, research on the effect on adolescents paints a very different picture (Brooks, Hair, & Zaslow, 2001). Their families’ incomes remained below the poverty line, yet their working parents are no longer available to support or supervise them during out-of-school time (Chin & Newman, 2002). Further adding to their burden, many teens are required to take on household chores and care for younger siblings. There have been increases in delinquent activity, decreases in school achievement, and more calls home from teachers to discuss problem behavior (Brooks et al., 2001; Chin & Newman, 2002; Heymann, 2000).

### ***The Media Context***

Early adolescents today are exposed to a constant media barrage of violence and sex that can influence their behavior and attitudes. They are bombarded by media-created images and messages regarding roles and behavior that are often at odds with the norms and values of their families and schools. Research indicates that youth who watch more television believe the world is a dangerous place and are more likely to see violence as an appropriate response

to problems (Borja, 2002; Condry, 1993; Dorr & Kovaric, 1980; Gerbner & Gross, 1980; Robinson, Wilde, Navracruz, Haydel, & Varady, 2001; Zuckerman & Zuckerman, 1985).

Negative academic outcomes have long been linked to television viewing. One study of young people between the ages of 9 and 17 found a link between high levels of television viewing and low scores on a standardized reading test (Timmer, Eccles & O'Brien, 1985). Young people who spend most of their free time in front of a television screen are also more likely to be in poor health, obese, and have more behavior problems (Beentjes & Van der Voort, 1988; Marshall et al., 1997; Timmer et al., 1985; Williams & Fosarelli, 1987). A recent study at Stanford University provided astonishing evidence of the strength of the effects of television watching, albeit on a younger cohort. Robinson and his colleagues (2001) compared third and fourth grade students in two matched classrooms—one of which used a six-month curriculum designed to reduce the use of television and videos. Over a seven-month period, the treatment group showed decreases in aggressive behavior at home, verbal and physical aggression, and their perception of the world as a mean and scary place.

Television is far from the only media activity popular with adolescents, of course. CD-ROM and video games, handheld electronic games, instant messaging, and internet surfing are leisure time activities that are so new we have little evidence of their effects, positive or negative. Common sense dictates that content will effect outcomes: a mystery game designed to increase skills in logical thinking and problem solving is likely to have different effects from one that promotes the murder of innocent citizens. No matter what the content, too much “screen time” is likely to divert young people from other more productive endeavors.

### ***The Economic Context***

The American economy has changed from one in which a rudimentary grasp of basic skills enabled one to find employment that would support a family to an economy where having only these skills renders one increasingly unemployable. (Jackson & Davis, 2000)

Today's adolescents are growing up in a very different economy from that faced by their

parents and grandparents. Not only are parents less likely to be available to their children, young people are also finding it increasingly difficult to build their own financial stability. Only a generation ago, male high school graduates from families with modest incomes could find employment earning a decent wage, whether in manufacturing, small business or climbing the corporate ladder (Entwisle, 1990). These jobs provided earnings high enough to support a family, and many married women, especially mothers, remained out of the labor force.

Much has changed. To maintain a middle class status today, two incomes are often required. Jobs for low-skill workers tend to be in the service sector and pay minimum wage with few, if any, benefits, little room for promotion, and difficult hours, e.g., mandatory overtime, evening and weekend shifts (Porter & Dupress, 2001). A high school education is no longer sufficient to get a good job (Murnane & Levy, 1996).

### ***The Educational Context***

Over the past decade, a political consensus has developed in the United States regarding the need for all students to gain academic skills considered necessary for success in a global economy. Forty-nine states have codified academic expectations into standards, and the use of tests designed to assess students' progress in meeting these standards has grown accordingly. In many cases, these tests are "high stakes," meaning a specified level of performance is required for graduation, promotion to the next grade or both. There has been much disagreement in education circles and the public at large about the usefulness of a high-stakes test approach to measuring students' academic performance, and there is little evidence of any connection between test scores and long-term success (Scherer, 2002).

In *Teaching the New Basic Skills: Principles for Educating Children to Thrive in a Changing Economy*, authors Murnane and Levy (1996) argue that employers today are interested in filling entry-level jobs with applicants who do well on tests of basic skills in math and English. However, companies are equally interested in whether prospective employees possess the "soft" skills—communication, teamwork and problem solving—needed for success in today's workplace. After a thorough examination of the requirements for work in many sectors of the national

economy, Murnane and Levy conclude the following are the minimum skills needed for entry into a middle class job:

1. ability to read at the ninth-grade level or higher
2. ability to do math at the ninth-grade level or higher
3. ability to solve semi-structured problems where hypotheses must be formed and tested
4. ability to work in groups with persons of various backgrounds
5. ability to communicate effectively, both orally and in writing
6. ability to use personal computers to carry out simple tasks like word processing

A recent survey of the top ten qualities that employers look for in college graduates came up with a nearly identical list (Bushnell, 2003). Today's students need the "hard" skills that are the focus of their lessons in school and related standardized tests, as well as the "soft" skills that may be developed in other arenas, including afterschool programs.

While the education system focuses on math and reading skills, international comparisons suggest that this country's educational system has not kept up with the rapid economic change of the past two decades. In international comparisons, American students achieve average scores in many subjects, and rank near the bottom in mathematics performance (Jackson & Davis, 2000). The performance of U.S. students is generally lower than what is considered acceptable on standardized tests. On the 1998 National Assessment of Educational Progress, for instance, only one-third of eighth graders performed at or above the proficient level in reading and less than a quarter performed at or above the proficient level in math (Jackson & Davis, 2000).

### ***The Achievement Gap***

The hurdle of high-stakes tests may create incentives to learn for some students; just as creating test-based accountability structures may result in improved education in some schools and districts. However, the playing field in education is far from level. Race, class and ethnicity remain powerful predictors of school achievement (D'Amico, 2001; Soto, 1990). Despite 40

years of education reform (Alexander, Entwisle & Bedinger, 1994; Traub, 2000), 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 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, familial, neighborhood, and societal circumstances (see Table 2). Many of the circumstances linked to poor achievement—low expectations by teachers, students' alienation from the school environment, lack of enrichment activities, weak social networks, and poor quality education—may be ameliorated, at least in part, through participation in afterschool programs. Reginald Clark, a prominent researcher in the field, suggests “we can accurately predict a youngster's success or failure in school by finding out whether or not he or she typically spends approximately 20 to 35 hours a week...engaging in constructive learning activity” (1988).

Table 2 - Why Do We Have An Achievement Gap?

1. Poor children do not enter school with the same cognitive skills (e.g., letter recognition, phonemic awareness) as higher SES children due to the lack of books, access to libraries, time spent reading during the preschool years, and lack of exposure to explanatory language and verbal interactions (Duke, 2000; Neuman & Celano, 2001).
2. Poor children, especially those from non-dominant cultures, do not enter school with the same “soft skills” (understanding of the behavior, social, communication, and work styles expected in school) due to their different cultural backgrounds. They have developed different interaction styles, expectations, social norms, and assumptions than those they face in the mainstream school culture (Allison & Takei, 1993; Comer, 1988; Delpit, 1988; Heath, 1982, 1994).

3. Students from low-income backgrounds often feel alienated from the school culture. These negative attitudes are exacerbated by the social pressures they must overcome, such as racism (Allison & Takei, 1993; D'Amico, 2001; Delpit, 1988; Heath, 1982, 1994; Heath & McLaughlin, 1996; Ogbu, 1987, 1992; Scharf & Woodlief, 2000).
4. As they get older, poor children and children of color are left behind because of their lack of access to enrichment activities during the summer and after school (Benson & Saito, 2000; Clark, 1988; Cooper, Charlton, Valentine, & Muhlenbruck, 2000; Cooper, Nye, Charlton, Lindsay, & Greathouse, 1996; Entwisle & Alexander, 1992, 1996; Heyns, 1978; Medrich, Roizen, Rubin, & Buckley, 1982; Peng & Wright, 1994; Quane & Rankin, 2001).
5. Low income parents sometimes do not fully understand the expectations of the school or possess the requisite skills to advocate for their children (Alexander et al., 1994; Clark, 1988; Gutman & Midgley, 2000).
6. Students living in areas of concentrated poverty do worse than their poor peers living in more affluent areas due to the effects of social isolation, crime, violence, and drugs (Connell & Halpern-Felsher, ; Connell, Spencer & Aber, 1994; Quane & Rankin, 2001; Sampson, 1997).
7. Teachers often have lower expectations of poor students and students of color, and respond more negatively to them (Clark, 1990; Comer, 1988; Connell, Halpern-Felsher, Clifford, Crichlow, & Usinger, 1995; D'Amico, 2001; Educational Research Service, 2001; Entwisle, 1990; Gutman & Midgley, 2000; Takei & Dubas, 1993).

8. Differences in the long-term “rewards” related to educational attainment due to job discrimination against African Americans, other minority groups, and women reduces the persistence of some young people in obtaining educational credentials (Takei & Dubas, 1993).
9. Students living in disadvantaged, inner city neighborhoods, who are overwhelmingly non-white, as well as students who attend schools that are less than 20 percent white, are much more likely to attend poor quality schools with less qualified teachers. The relative quality of such schools has gotten worse over time (Cook & Evans, 2000; D’Amico, 2001; Educational Research Service, 2001; Lee, 2002).

### **Summary**

Early adolescence is a pivotal period when children develop trajectories that are likely to carry into their adult lives. Many of the circumstances and developmental tasks facing young adolescents today are similar to those faced by previous generations. Taking some risks is part of normal adolescent development (Maggs et al., 1995). Unfortunately, young people today confront additional risks, including AIDS, gun violence, and high-stakes testing, coupled with a period of decreased availability of family and societal support. If the developmental changes of early adolescence are not negotiated successfully, the results are likely to be school failure, inadequate skills, teenage pregnancy and parenthood, alienation, dependence on drugs or alcohol, and a lack of preparation for adult employment.

### III. Engagement in Learning

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“Something important happens between 7th and 9th grade that adversely affects many students” (Steinberg, quoted in Olson, 2002, p. 9).

Academic achievement is the result of many complex, interrelated factors. Preschool experiences and parenting are important, as is the quality of schooling a child receives, including class size, curricula, teacher training, and emotional climate (Alexander, Entwisle, & Horsey, 1997; Haveman & Wolfe, 1995). Relationships—with teachers, parents and other caring adults—matter a great deal. Having a relationship with a caring adult can make a significant difference in the life trajectory of a disadvantaged young person (Connell et al., 1994; Garnezy, 1991; Pianta, 1999; Rutter, 1987; Scales & Leffert, 1999; Werner, 1989).

Students who are engaged in learning take interest in their schoolwork, make an effort to earn good grades, and attempt to master the subject matter on their own before requesting assistance (Connell, Halpern-Felsher et al., 1995). Students who are alienated from school, on the other hand, score lower on psychological assessments of adjustment, are more likely to act out aggressively, are far more likely than their peers to use alcohol and drugs, become sexually active at an early age, and commit acts of juvenile delinquency and crime (Hawkins & Weis, 1985; Resnick et al., 1997).

Unfortunately, there is overwhelming evidence that many students experience a marked decrease in school engagement during the middle school years. Data on nearly 100,000 students from the Search Institute suggests that “the middle school years are typically a time of lowered interest, motivation, and effort in school” (Scales & Leffert, 1999, p. 145). Average grades falter; self-esteem, interest in school and confidence in academic abilities declines; and truancy increases (Eccles & Midgley, 1989; Gutman & Midgley, 2000; Larson, 1994; Larson & Kleiber, 1993; Scales & Leffert, 1999).

Data from ADD Health, which includes information on approximately 12,000 students in

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

grades 7-12, indicates that the sharp increase in disengagement from learning usually associated with older adolescents actually occurs during the junior high years between 7th and 9th grade (Olson, 2002). Laurence Steinberg and his colleagues found that students reported paying less attention in class, feeling more distant from people at school, and believing their teachers cared less about them. There was not a similar drop-off over the next three years (Olson, 2002; Steinberg, Brown & Dornbusch, 1996).

In another ten-year study of more than 20,000 teenagers and their families from nine communities, Steinberg and his colleagues (1996) found that nearly 40 percent of the students were “just going through the motions.” They were exerting little effort in the classroom, not doing homework, cheating on tests, occasionally cutting classes, and choosing easier courses.

At a time when early adolescents are experiencing physical and social changes that may distract them from academic pursuits, they also enter an academic environment less in tune with their developmental needs. Studies by Eccles and her colleagues (Eccles & Midgley, 1989; Eccles & Midgley, 1990; Gutman & Midgley, 2000) paint a convincing portrait of the conflict between the developmental stage of early adolescence and the environment of most middle and junior high schools.

Just as early adolescents pine for increased independence and autonomy, they typically have less opportunity to make decisions regarding the process or content of their schooling. Their need for peer group approval is poorly matched by the tendency of junior high teachers to compare students to each other rather than to their own prior performance. Early adolescents’ desire for strong relationships with non-parental adults is a poor match with the impersonal halls of large junior high and middle schools where they have less opportunity for positive relationships with their teachers (Eccles & Harold, 1996; Eccles & Midgley, 1989; Eccles & Midgley, 1990; Eccles, Wigfield & Schiefele, 2000).

Unfortunately, the negative effects of the transition to junior high are most pernicious for those already at greatest academic risk: low-performing students, poor students, students

from African American or Latino ethnic or racial backgrounds, and students with limited English proficiency (Gutman & Midgley, 2000; Scales & Leffert, 1999; Simmons & Blyth, 1987).

Afterschool programs can't change students' school experiences, but they can provide alternative environments that may be more in tune with young people's interests, motivations and needs. Programs may provide opportunities for the kind of personal attention from adults that young people crave, a positive peer group, and activities that hold their interest and build their self-esteem. Adolescents are most likely to be in a state of intense, sustained engagement during certain activities—art, sports, games, hobbies, and other structured voluntary activities (Larson, 2000). It is this “flow” experience that builds intrinsic motivation and initiative (Csikszentmihalyi, 1990; Csikszentmihalyi & Nakamura, 1989).

In his essay, “Seventeen Reasons Why Football is Better than High School,” Herb Childress (1998) points out the differences between activities that occur after school and those during a typical school day. In activities (including but not limited to football) after school, students are usually viewed as important contributors rather than passive recipients. They choose their roles, help others who are less skilled, and are critical to the success of the project. They are honored for their accomplishments as well as expected to have strong feelings and relationships. In many high quality afterschool activities, young people experience a group setting where every individual's effort makes a difference, where they spend significant time (rather than a class period) focused on a specific skill, and where they receive a lot of individual attention from adults.

Afterschool programs can also create a bridge or “border zone” between the culture of peers, families and communities on the one hand, and the school environment on the other (Heath, 1994; Jackson & Davis, 2000; Scharf & Woodlief, 2000). Will these practices increase students' engagement in learning? To answer this question, we must explore education literature to identify factors that motivate students to become committed to learning.

### ***What Promotes Engagement in Learning?***

Students are most motivated to learn, feel the greatest sense of accomplishment, achieve at the highest levels when they are able to succeed at tasks that spark their interest and stretch their capacities. To be meaningful, learning must effectively connect to students' questions, concerns, and personal experiences, thereby capturing their intrinsic motivation and making the value of what they learn readily apparent to them. (Learning First Alliance, 2001, p. 4)

When the school setting is not in tune with the developmental needs of students, they are likely to lose interest. Students of any level of intelligence will do poorly in school if they are not fully engaged in the learning experience. Students who are engaged are focused, enthusiastic and persistent when faced with challenges. They choose tasks that stretch their abilities and challenge their current knowledge, and participate actively in class, using their own skills to think about the topic or problem at hand. Engaged students may be motivated for a number of different reasons: personal interest in a topic; desire to maintain a positive relationship with a respected teacher; desire for the approval of peers, parents or other adults; a belief that success will lead to rewards in the long run; or a desire to maintain or increase their own sense of their ability to do things well.

A body of literature known as “resiliency research” can help us understand the individual, family, school, and community factors that help to promote engagement in learning (Clark, 1987; Comer, 1984; Garmezy, 1985, 1991; Masten, Best & Garmezy, 1990; Rutter, 1987; Vandell, Shumow & Posner, 1996; Werner, 1989; Werner & Smith, 1982; Werner, 1993). This field has studied children who face multiple risk factors, like poverty, chronic health problems, trauma, domestic violence, low birth weight, and racism.

Rather than focusing on the negative effects of these stressors, resiliency researchers carefully tease out the supports, relationships and experiences that enable some children to succeed despite adversity.<sup>1</sup> The results of this research (combined with other research in education

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<sup>1</sup> See Appendix A for a brief summary of resiliency research.

and psychology) suggest four major factors that explain students' engagement in learning:

1. A sense of oneself as a competent learner
2. Parents who are involved in the child's education
3. Emotional attachments to caring adults
4. Exposure to positive peer influences

A discussion of each of these factors follows.

### ***A Sense of Oneself as a Competent Learner***

Motivated students have what is known as high “academic efficacy.” Students who have academic efficacy believe their success in school is due to factors under their control—they have confidence in their academic abilities and feel that if they work hard, they will do well. They do not believe that teacher favoritism, luck or the difficulty of the curriculum plays a large part in the outcome of their schoolwork. Students with low academic efficacy, or a lack of belief in their ability to control their school achievement, feel just the opposite. If they succeed, they attribute it to good luck or an easy assignment. If they fail, they believe it is due to an unfair teacher, bad luck or a very hard test. Not surprisingly, efficacious students are much more likely to experience academic success (Connell, Halpern-Felsher et al., 1995; Gutman & Midgley, 2000; Steinberg et al., 1996; Wentzel, 1999; Wentzel & Wigfield, 1998).

Students must also come to school motivated to learn. Steinberg's work indicates that many junior high school students today recognize the importance of graduating, but not of performing well beyond the level required to avoid failure (Steinberg et al., 1996). Students who face daunting economic barriers to professional success may see little point in working harder than needed to “get by.” In order to go beyond that level, students must believe both that there will be rewards *and* that they have the capacity to do the work required to meet higher expectations.

In a study of 62 African American families, Gutman and Midgley (2000) looked at the effects of protective factors on the academic achievement of low-income African American middle school students, examining the links between four protective factors (academic self-efficacy, parental

involvement, perceived teacher support, and feelings of school belonging) and grade point average during the middle school transition. Academic self-efficacy—the sense that one is having an impact on one’s educational outcomes—was associated with higher grade point averages in sixth grade, even taking into account fifth grade school performance. In addition, students with high levels of parental involvement and feelings of school belonging or teacher support had higher grade point averages in sixth grade than peers who had only one factor or no factors.

### ***Involved Parents***

We have substantial evidence that parental involvement is key to positive academic outcomes for youth (for example, see Alexander & Entwisle, 1988; Comer, 1984; Epstein, 1996; Henderson & Berla, 1994; Henderson & Mapp, 2002; Keith & Keith, 1993; Putnam, 2000; Steinberg et al., 1996)<sup>2</sup>. The benefits of parental involvement accrue to all ethnic and socioeconomic groups, and include higher grades and test scores, better school attendance, more time spent on homework, reduced drop-out rates, increased rates of college attendance, and improved behavior and social skills.

Many parents demonstrate their concern by participating in school activities and conferences. However, even parents who are not available during school hours or choose not to engage in school-based activities can provide a critical link. Clark (1983) compared families of high-achieving and low-achieving poor African American adolescents. He found that parents of high-achieving students were not only more active at the school itself, but also within the home, holding frequent conversations with their children about school and monitoring their activities both during and after school.

It is important to note that parents’ participation in the school is less important than high expectations of children’s academic performance and attainment, as well as parent-child communication (Keith & Keith, 1993). When parents have high expectations based on accurate assessments, many of the effects of income, class or race on academic achievement are

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<sup>2</sup> Research on risky behavior suggests that a positive relationship with a parent is key to positive outcomes in this area as well. See Blum (Blum et al., 2000).

diminished (Alexander & Entwisle, 1988; Feagans & Bartsch, 1993; Peng & Wright, 1994; Soto, 1990). Researchers comparing the academic achievement of Asian American students to other minorities found that parental involvement played a critical role (Peng & Wright, 1994). Asian American parents were more likely to have high educational expectations of their children, place a priority on homework (even if they couldn't actually help their children complete assignments), and engage their children in meaningful conversations about the world around them (Peng & Wright, 1994).

Afterschool programs can serve as a link between school and family. This is especially true in the elementary years, when parents typically pick up their children at the program. Parents often have much more contact with afterschool staff than with their children's teachers, and form relationships with them that may carry over several school years. Afterschool programs can encourage positive communication between schools and parents by helping parents understand the school's expectations, curriculum and culture (Fiester, White, Reisner, & Castle, 2001; Noam, Biancarosa & Dechausay, 2001). Programs can also help school staff to develop better understanding of parents' cultures and concerns as well.

### ***Emotional Attachments to Caring Adults***

Parents are not the only important adults in the lives of young people. Resiliency research attests to the over-arching significance of adult mentors and role models, especially for young people who face educational disadvantage. In many studies, the single most important factor in long-term success is the presence of an adult, whether a relative, teacher or community member, who provides a consistent nurturing presence in a young person's life (Garmezy, 1985, 1991; Pianta, 1999; Rutter, 1987; Vandell et al., 1996; Werner, 1989).

The most effective teachers are those who build strong relationships with students, provide opportunities for students to contribute, and foster a welcoming environment. Research indicates the effects of these relational practices far outweigh the value of a teacher's credentials or years of experience in effectively promoting learning (Entwisle, 1990; Pianta, 1999; Resnick et al., 1997; Wentzel & Wigfield, 1998). Smaller schools and smaller classrooms

are also more effective for exactly this reason: they create an environment that allows teachers to build individual relationships with their students (D'Amico, 2001).

Caring adults do not necessarily have to be teachers. Parents, church members, afterschool staff, and others who form a strong relationship with a young person have a powerful opportunity to guide his or her attitudes toward school and eventual school success (Garmezy, 1985, 1991; Rutter, 1987; Werner, 1989; Werner, 1993). As Werner (1993, pg. 513) notes:

Our own research and that of our American and European colleagues...who have followed resilient children into adulthood has repeatedly shown that, if a parent is incapacitated or unavailable, other persons in a youngster's life can play such an enabling role, whether they are grandparents, older siblings, caring neighbors, family day-care providers, teachers, ministers, youth workers in 4-H or the YMCA/YWCA, Big Brothers or Big Sisters, or elder mentors.

A combination of caring adults and small groups allows students to develop a sense of connection to school (or an afterschool program). Resiliency research indicates that students who feel a sense of belonging and identification with their school are more likely to have positive attitudes toward school, higher academic aspirations, motivation, and achievement (Resnick et al., 1997).

### ***Positive Peer Influences***

Getting along with peers and adults is linked to success in school (Wentzel, 1991). Social competence influences academic outcomes directly, e.g., when learning takes place in small groups or cooperative situations, and indirectly when it supports a positive climate in the classroom. Wentzel suggests that appropriate social behavior may be particularly important for middle school students: "Teachers of early adolescents tend to spend much of their time dealing with issues of classroom management and student behavior...Thus, behaving appropriately and responsibly may be especially important for explanations of learning and achievement at this age." (1993, p. 358)

Young people's susceptibility to peer pressure peaks during the middle school years (Harter, 1999; Lerner, 1993b; National Research Council, 2002). When students' peer groups do not support, and even belittle, academic achievement, motivation is likely to fall (D'Amico, 2001). Nearly 20 percent of the students surveyed by Steinberg and his colleagues said that they "do not try as hard as they can in school because they are worried about what their friends might think" (Steinberg et al., 1996). An early adolescent's peer group becomes incorporated into his or her identity, and the normative standards for achievement and behavior in school are likely to have a powerful effect on motivation and school performance, sometimes outweighing the influence of parents.

Recent research suggests that peer influences may explain much of the racial achievement gap. Asian students, who perform better than white, Black or Latino students on average, tend to have academically oriented friends who work hard to succeed in school (Cook & Evans, 2000). Typically, the peers of African American and Latino students spend less time on homework, have lower standards regarding what passes for acceptable grades, and are generally less committed to education (white students fall in the middle). Black and Latino parents are just as committed to education as parents of other ethnic backgrounds, just as involved, and are equally likely to have parenting practices that support academic success (Clark, 2002). However, if their children belong to peer groups that devalue or belittle academic effort and achievement, they may find themselves in the position of having to choose between doing well and having friends (McWhorter, 2002).

A growing body of research focuses on the central role of relationships and problem-solving skills in building engagement in learning. "Social and emotional competency refers to the capacity to recognize and manage emotions, solve problems effectively, and establish and maintain positive relationships with others" (Ragozzino, Resnik, Utne-O'Brien, & Weissberg, 2003, p. 1). As suggested by the theory of change, studies have found that increases in social and emotional competence translate to improvements in academic behavior and attitudes (Goleman, 1995; Ragozzino et al., 2003; Ryan & Patrick, 2001). Children who participate in Social-Emotional Learning (SEL) programs have decreased discipline problems, better academic

functioning, increased acceptance of differences, and greater emotional well being (Goleman, 1995; Hawkins & Weis, 1985; Patti & Lantieri, 1999; Weissberg & Greenberg, 2000).

In one study, students in elementary schools that had fully implemented the Social-Emotional Learning initiative were followed to middle school where they reported liking school more, greater motivation to learn, and more trust in their teachers than non-program students (Developmental Studies Center, 2002). Many SEL programs occur during the school day, but evidence suggests the outcomes would be similar if the programs were implemented after school (Carlisi, 1996; Vandell & Pierce, 1999; Vandell & Posner, 1999).

### **Summary**

If afterschool programs are to support the school success of middle school students, they must attack the critical “prerequisite” to academic achievement: a desire to learn. 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. In a field as diverse as afterschool, not all programs will have the same strengths, however. The next section describes the landscape of afterschool programs—what do they look like? Who do they serve? What are their goals and what methods do they use to achieve them?

## IV. The Landscape of Afterschool Programs

What do afterschool programs look like? The answer is “nearly everything.” The field has developed from distinctly different roots into the wide variety of programs available today. One afterschool program may resemble a preschool, serving young children of working parents, while another is a video club for high school students. This section establishes a framework for afterschool programs. Each program category—School-Age Care, Positive Youth Development, Extended Learning, and Enrichment Activities—originates from a different

history and has particular goals, structures and accountability frameworks (see Table 3).

### ***School-Age Care***

School-age care (SAC) evolved in the 1980's as mothers moved into the labor force in large numbers. Formal child care became a normal part of most children's experiences during their preschool years. However, when children entered school, the need for child care did not end—children spend more than 80 percent of their waking hours outside of the regular school day. School-age care was developed to fill this gap by providing supervision for the children of working parents at neighborhood and school-based centers before and after school hours, during school vacations, holidays and professional days, and often in the summer as well. According to the National Study of Before and After School Programs sponsored by the U.S. Department of Education, over 50,000 such programs were in existence in 1991 (Seppanen, Love, de Vries, Bernstein, & Seligson, 1993). Of the estimated 1.7 million children served by SAC at this time, more than 80 percent were in the kindergarten to third grade age group.

The development of the National School-Age Care Alliance (NSACA) in the mid-1980's provided such programs with a common identity. In the early 90's, the development of quality standards signified a broad consensus on how to ensure positive outcomes for children. These standards subsequently became the basis for NSACA program accreditation (National School-Age Care Alliance, 1998), providing a tool for public recognition of quality attainment.

The mission of school-age care programs has always been twofold—1) to help parents balance work and family responsibilities, allowing them to maximize their productivity, and; 2) to promote children's social, emotional, creative, and physical development. However, as a relatively new and underdeveloped field, there is no clear consensus as to what content is most appropriate or effective for these programs. Constraints in funding, infrastructure, capacity, and training mean that many programs can't reach the vision of quality codified in accreditation standards.

Research on SAC program participation indicates there are positive effects for students of

varied ages, backgrounds and personal characteristics (Howes, Olenick & Der-Kiureghian, 1987; Marshall et al., 1997; Miller, 2000; Posner & Vandell, 1994; Vandell & Su, 1999). Positive effects include increased academic performance (grades, attendance, test scores); social competence (behavior in school, at home and relationships with peers); and reduction in risky behaviors. Positive effects are most apparent in programs serving low-income children. We don't know, however, which program-related factors result in benefits to children and families. Is it the relationship with a staff member? Is it the simple fact of getting children off the streets? Is it due to specific activities that develop personal interests and a sense of competence, or the friendships that often bloom in a positive climate? Research is just beginning to answer these questions.

### ***Positive Youth Development***

At the same time that school-age care was developing, another movement focused on older youth was growing in cities around the country. In the 1980's, funding for prevention programs increased and nonprofit organizations expanded existing programs or initiated services for youth aimed at preventing drug abuse, teen pregnancy, dropping out of school, and juvenile delinquency.

The prevention approach represented a step forward from the days of dealing with problems only after they occurred. However, two critical issues became apparent to many practitioners:

1. They were often "treating" the same youth in a variety of programs. Because poor, inner city young people of color were at risk of many problems, it didn't make sense to set up a different program for each one.
2. The deficit model, which treated youth as "problems to be solved," was not producing much long-term success.

In the 1990's, prevention-oriented youth work underwent a paradigm shift, resulting in the positive youth development approach (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 1998; Connell, Gambone & Smith, 2001; Pittman & Irby, 1996; Pittman, Irby & Ferber, 2000). Promoters of this approach advocate the following:

“...*broaden the goals* to promote not only problem reduction, but preparation for adulthood; *increase the options* for instruction and involvement by improving the quality and availability of support, services, and opportunities offered; and *redefine the strategies* in order to ensure a broad scale of supports and opportunities for young people that reach far beyond the existing status quo (Pittman et al., 2000, pg. 20).

Leaders of the paradigm shift relied on research studies of resiliency, in particular, to buttress and guide their concepts as they moved from a deficit orientation toward a developmental asset approach (for a historical overview and literature reviews, see Benson & Saito, 2000; Catalano et al., 1998; Scales & Leffert, 1999).

Positive youth development is often described as an approach rather than a program. Programs identified as youth development encompass an exceedingly wide range of models—from drop-in recreation centers, mural projects, mentoring and afterschool tutoring to arts programs, community action projects, 21<sup>st</sup> Century Community Learning Centers, and sports activities.

Despite this variation, a great deal of work has been done to articulate both the components of positive youth development and the outcomes it supports (Catalano et al., 1998; Connell et al., 2001; Forum for Youth Investment, 2002; National Research Council, 2002; Scales & Leffert, 1999). The Search Institute, Forum for Youth Investment, Center for Youth Development and Policy Research, and Community Networks for Youth Development, among others, have developed lists of assets needed by youth and the characteristics of the settings that promote these assets. The National Research Council’s recent review (2002) identified 27 personal and social assets that facilitate positive youth development.

Several excellent evaluations of youth development programs have documented significant positive outcomes associated with program participation (Gambone & Arbretton, 1997; National Research Council, 2002; Tierney, Grossman & Resch, 1995). However, in a field as broad as positive youth development, it is not always clear that the findings of a study focused

on, for example, Big Brothers/Big Sisters affiliates, will apply to the varied range of models that exist. As is true for school-age care, research on the effectiveness of various youth development program characteristics is in an early stage of development (Catalano et al., 1998). We will review this research in Section VI.

### ***Extended Learning***

Over the past five to ten years, many school districts have seen afterschool programs move from a smattering of academic support activities to a central function of the school system. Schools have always sponsored tutoring, homework help and academic support programs for low-performing students, which they viewed as directly supporting the mission of the school. In this era of high-stakes testing and increased accountability, however, many school districts are intensely interested in developing school-based afterschool programs that promote academic achievement.

The goal of school-sponsored programs—increased student performance—is clear. But the approach to achieving it remains elusive and is currently the subject of much discussion in the field. Many Extended Learning programs are basically an extension of the school day, and operate under the assumption that more time will result in better outcomes for students. However, as more schools enter the afterschool program field, their horizons are broadening. Many programs find that simply sitting students at desks and using the same learning strategies for more hours doesn't result in much long term benefit. For many underachieving students, “more school” isn't the answer. Thus, academically oriented programs are engaging community partners and attempting to achieve desired goals by providing a wider variety of activities and opportunities (U.S. Department of Education, 1997).

### ***Extracurricular Activities***

In addition to the three prototypes (School-Age Care, Positive Youth Development and Extended Learning) described earlier, there are many extracurricular activities that middle and high school students, in particular, participate in after school. Extracurricular activities are structured, voluntary activities usually led by one or more adults who provide opportunities

for students to share experiences and build specific skills in the context of a group of similarly interested peers.

We don't have precise information on the percentages of middle school students engaged in extracurricular activities, but information on high school students from the National Educational Longitudinal Study provides an estimate of the number of tenth graders involved in extracurricular activities at school or in the community (Steinberg et al., 1996; Zill et al., 1995, see also Steinberg, 1996). In 1990, tenth grade students in the U.S. spent less than an hour per week, on average, in school-sponsored extracurricular activities. A full 40 percent said they spent no time at all in such activities; 35 percent spent between one and four hours; 23 percent spent between 5 and 19 hours; and the remaining 2 percent spent 20 hours or more in such activities (Zill et al., 1995). Tenth graders who *do* engage in extracurricular activities attend the following: religious activities (31 percent); youth groups or recreational programs (20 percent); music, dance or other lessons (20 percent); play sports (13 percent); perform community service (7 percent).

Table 3 - Prototypes of Afterschool Programs				
	School-Age Child Care	Youth Development	Extended Learning	Enrichment Activities
Major Goals	<ul style="list-style-type: none"> <li>Provide supervision for children of working families</li> <li>Support child development</li> </ul>	<ul style="list-style-type: none"> <li>Promote youth development</li> <li>Prevent risky behaviors</li> </ul>	<ul style="list-style-type: none"> <li>Improve academic achievement</li> <li>Decrease gaps in academic achievement</li> </ul>	<ul style="list-style-type: none"> <li>Increase skills in particular areas (arts, sports)</li> <li>Create interests in various topics and activities</li> </ul>
Accountability Framework	<ul style="list-style-type: none"> <li>Licensing</li> <li>Accreditation</li> </ul>	<ul style="list-style-type: none"> <li>Outcomes-based evaluation</li> </ul>	<ul style="list-style-type: none"> <li>State standards-based tests</li> <li>School achievement</li> <li>Education, health and safety codes</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary participation rates indicate success</li> <li>Specific activities may have own framework (e.g., science fairs, athletic competitions)</li> </ul>
Staff	<ul style="list-style-type: none"> <li>Child care staff</li> </ul>	<ul style="list-style-type: none"> <li>Youth workers</li> </ul>	<ul style="list-style-type: none"> <li>Teachers</li> <li>Paraprofessionals</li> </ul>	<ul style="list-style-type: none"> <li>Experts in a particular area</li> </ul>
Funding	<ul style="list-style-type: none"> <li>Parent fees</li> <li>Child Care Development Fund</li> </ul>	<ul style="list-style-type: none"> <li>Philanthropy</li> <li>State and federal crime and drug prevention funds</li> </ul>	<ul style="list-style-type: none"> <li>State and federal grants</li> <li>Local district support (in-kind)</li> <li>Tuition—for-profit academic programs</li> </ul>	<ul style="list-style-type: none"> <li>Non-school based parent fees</li> <li>School-based extracurricular activities may be free or offer scholarships</li> </ul>

(adapted from "The Promise of Afterschool Programs," Beth M. Miller, *Educational Leadership*, April 2001)

### ***Access to Opportunities***

All youth do not have equal access to afterschool programs, lessons or activities. Middle class children are more likely than their less affluent peers to attend programs and lessons after school. Parents' educational and income levels make a big difference in access to afterschool opportunity (Benson & Saito, 2000; Hofferth, Brayfield, Diech, & Holcomb, 1991; Hofferth & Jankuniene, 2000; U.S. Department of Education, 1996). When it comes to engagement in most afterschool activities, children of mothers who work part-time and live in two-income families are at an advantage. Children with special needs find their options severely limited (Scharf & Woodlief, 2000). School-based sports are somewhat of an exception to these patterns: Hofferth (2000) found that Hispanic children, as well as children of less educated parents, are more likely to play sports or be involved in outdoor recreation at school than other children.

Children in more affluent communities, often located in the suburbs, have access to a wide variety of enrichment activities. A typical week for an affluent school-age child might include flute lessons, swim team practice, rehearsal for a school theatrical performance, and a karate class. Young people who live in a lower-resource inner city or rural environment are much less likely to have access to such activities, especially if they take place outside of school (Hofferth & Jankuniene, 2000; Littell & Wynn, 1989; U.S. Department of Education, 1996; Zill et al., 1995). Data on eighth graders from the National Education Longitudinal Study indicates that only 17 percent of those in the highest income quartile had no involvement in extracurricular activities compared to 40 percent of students in the lowest income quartile (National Center for Education Statistics, cited in Quinn, 1995).

Fees certainly present a major barrier (Seppanen et al., 1993) to program enrollment. Other access inequities may be due to less obvious issues: when parents don't speak English, don't feel welcome in a program, or encounter unfamiliar values and approaches, access is denied. Young people are also unlikely to be interested in programs where they may face racial and cultural stereotypes, or staff who simply don't understand their lives (Scharf & Woodlief, 2000).

Over a decade ago, Littell and Wynn (1989) constructed a survey to ascertain whether the opportunities available to young people in inner city environments are more limited in number or type than those available to youth in affluent suburban communities. They found just 23 activities per 1,000 youth in Innerville (the pseudonym for the urban community), and 71 per 1,000 youth in Greenwood (the suburban community). The researchers also discovered that opportunities available in low-resource communities were often preventive or remedial in nature, i.e., drug prevention, drop-out prevention, pregnancy prevention, while those available in affluent communities were enrichment-oriented and included sports, art classes, music lessons, civic or community service projects, and clubs.

Even when programs are tuition-free and located in disadvantaged neighborhoods, there is increasing evidence that students with the greatest need are least likely to enroll. The evaluators of the Extended-Service School Adaptation Initiative, which serves students in 60 afterschool programs in 17 cities around the country, found that students who enrolled in programs were somewhat less likely to be from low income families, single parent families or non-English speaking families than their peers (Grossman et al., 2002; Grossman, Walker, & Raley, 2001).

### **Summary**

Each of the prototypes—school-age care, youth development, extended learning, and enrichment—has strengths that contribute to the field. *School-age care* has maintained a focus on the role of afterschool vis-à-vis the family unit, including reaching out to families, connecting families to schools, and meeting the needs of the vast majority of parents who must work. *Youth development* responds to the question: What are we trying to do for children and youth? The conceptual framework is built on the scientific foundations of resiliency, developmental psychology and community psychology. The youth development approach can be applied to all types of afterschool programs. Many *extended learning* programs benefit when they are integrated into the school infrastructure, thereby obtaining access to classrooms, libraries and computer labs as well as certified teachers to support homework completion or tutoring. Extended learning programs are notable for focusing on a set of goals for each student.

Increasingly, programs today are developing a model that includes the best from each prototype, combining responsiveness to parental work requirements and family concerns with a focus on building youth assets and integration of intentional learning strategies. Unfortunately, the majority of middle school students do not have access to such programs. Students who don't attend afterschool programs or activities are missing out on important opportunities that can benefit them, and, in the long run, society.

### V. What To Do After Two P. M.

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What are early adolescents doing during out-of-school time hours? What difference does it make? Unfortunately, we do not know enough about what children do after school. Several studies, all somewhat outdated, suggest that about 60 percent of adolescents' time is invested in school and other productive activities, while about 40 percent is discretionary (Csikszentmihalyi & Larson, 1984; Timmer et al., 1985). Of this "leisure" time, 40 percent is spent socializing; 20 percent is spent watching television; and very little time is spent reading or in other constructive activities like the arts and sports (Medrich et al., 1982; Timmer et al., 1985; Zill et al., 1995).

Reginald Clark's work (1987; 1988; 1990; 1992) suggests it is the difference in the number of hours spent in constructive or "high-yield" activities that explains much of the achievement gap. Clark employs observational methods to look beyond factors like family structure or school size to identify the *processes* that make a difference in a young person's life. Clark's research led him to conclude that high achieving students needed to spend at least 25 hours per week in what he calls "high yield leisure activities." He defines high yield leisure activities as those that:

...provide abundant opportunities for youngsters to practice such activities as reading, writing, verbal communication, problem solving, and decision making. They are "leisure" in the sense that they are done for fun. Reading a book for fun is one example. Others include talking with parents about the day's news...playing board games; engaging in

hobbies; participating in organized youth activities...attending summer camps; visiting museums; attending plays (Clark, 1990, p. 21).

Whether they take place in extracurricular activities at school, afterschool programs, or private lessons, exposure to a range of opportunities after school is important because they help children find meaning in what they learn in school. Children who spend their time after school applying curricular content in a variety of contexts—developing interests, building competence and enjoying relationships with peers and adults—are engaged in learning (Heath & McLaughlin, 1996). Children who don't have these opportunities and spend time without adult supervision face risks to their learning and development.

### ***Self-Care: A Risky Situation?***

An estimated eight million children between the ages of 6 and 14 regularly spend their discretionary time without adult supervision (National Institute on Out-of-School Time, 2001a). Are these children at risk? Are early adolescents old enough to be on their own? What factors increase the possibility that latchkey children will get into trouble?

National data suggests that middle school-age children are much more likely to be in self-care and less likely to be in supervised arrangements than younger school-age children. While only 10 percent of 10 to 12 year-olds attend afterschool programs as a “primary” arrangement (the one in which they spend most of their after school time), 24 percent spend more of their time home alone than in any other setting (Capizzano, Tout & Adams, 2000). More than one-third of children in this age group spend some time caring for themselves each week as either a primary or secondary arrangement. This proportion increases with age: 23 percent of 10-year-olds spend some time caring for themselves compared to 44 percent of 12-year-olds (Capizzano et al., 2000).

These figures, based on data from the National Survey of American Families, probably underestimate the true number of latchkey children in this country. Parents are often reluctant to report that their child is home alone, and different methods of asking questions about self-

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

care have resulted in widely differing estimates of the number of latchkey children (see Seppanen et al., 1993 for a discussion). Smaller scale studies have found a much higher proportion of unsupervised 10 to 12 year olds—in some cases, over 60 percent (e.g., Dwyer et al., 1990; Hedin, Su & Hannesen, 1981; Mulhall & Stone, 1996; Williams & Fosarelli, 1987; Youngblade & Harris, 1986).

While we might assume that self-care is more prevalent among 13 and 14 year-olds than 10 to 12 year-olds, no national data is available to provide a specific estimate. Nor do we know much about the other activities in which children this age are engaged. It is presumed that many middle schoolers baby-sit for younger children or siblings. We also know that teens are most likely to engage in risky behavior, including vandalism, violent crime and sexual activity during these hours (Cohen, Farley, Taylor, Martin, & Schuster, 2002; Fox, 1996; Newman, Fox, Flynn, & Christeson, 2000). Given the increased risks facing many youth, as well as their need for educational support, there is growing concern that young teens need greater access to constructive afterschool activities.

Whatever the age of the child, “self-care” is a catchall term for what might be considered a range of after school settings. Some latchkey kids are only alone for an hour or so a week, but others spend every afternoon and long school vacations bored, lonely and unsafe. Latchkey children spend their time in a variety of locations: inside a locked apartment; at home under the supervision of neighbors or relatives; and hanging out with peers in the mall or on the streets. A child who feels safe in a cohesive neighborhood or rural surroundings may not have the same experience as one who lives in a neighborhood where crime and violence are prevalent.

Variations in the self-care context result in different results for children. Self-care is not always bad and it doesn't always result in negative outcomes. The level of adult supervision available to the child seems to be the key. Steinberg (1986) found that children at home where parents could easily check in were less at risk than those at a friend's house. Other studies have bolstered Steinberg's finding that the most susceptible youth of all are those hanging out

in the neighborhood (Galambos & Maggs, 1991; Pettit, Laird, Bates, & Dodge, 1997; Quane & Rankin, 2001; Vandell & Su, 1999).

Who is most at risk? Children who begin the self-care arrangement at younger ages, (Richardson, Radziszewska, Dent, & Flay, 1993; Vandell, 1995), spend more hours in the latchkey situation (Vandell, 1995), have lower levels of parental monitoring (defined as poor parent-child communication, phone calls to check in, rules regarding homework and guests, and access to other adults) (Galambos & Maggs, 1991; Pettit, 1997; Quane & Rankin, 2001), or live in low-income neighborhoods (Flowers & Mertens, 2000; Marshall et al., 1997; Quane & Rankin, 2001; Vandell, 1995) are the most likely to experience negative outcomes such as alcohol and drug use (Mulhall & Stone, 1996; Richardson et al., 1993); problems with social and behavioral adjustment (Marshall et al., 1997; Pettit, 1997; Richardson et al., 1993; Vandell, 1995); poorer school performance (Mulhall & Stone, 1996; Pettit et al., 1997; Vandell, 1995); and a wide variety of other risky behaviors (Dwyer et al., 1990; Richardson et al., 1993; Steinberg, 1986).

Several studies have focused on the effects of self-care on the well being of middle school youth. In 1990, a group of health researchers surveyed nearly 5,000 eighth graders living in urban areas in Southern California (Dwyer et al., 1990; Richardson et al., 1993). They found that latchkey children, especially those who spent many hours home alone, were significantly more likely to use drugs and alcohol and reported higher levels of stress and anger. Data from 46,000 middle school students who are part of the Michigan Middle Start Initiative study reveals that latchkey students are more likely to report problems with depression, lower self-esteem, behavior problems, and less academic efficacy than students who are never home alone or are alone only a few hours a week (Center for Prevention Research and Development, 1998; Flowers & Mertens, 2000). “Students home alone each week for three or more consecutive hours, even if only on one or two days, reported significantly worse results on all the student outcomes than those students who were home alone for less than three consecutive hours” (Center for Prevention Research and Development, 1998).

### ***Outcomes of Extracurricular Activities***

Regardless of whether they spend some time in self-care or not, many early adolescents participate in extracurricular activities, including team sports, school bands and other school-sponsored activities, as well as community service, music lessons or participation in clubs. Participation in extracurricular activities is highly correlated with school success, including consistent attendance, academic achievement and aspirations to continue education beyond high school (U.S. Department of Education, 1995). Particularly for high school students, the link between involvement in extracurricular activities and achievement in school is well established in the research literature (Astroth & Haynes, 2002; Broh, 2002; Camp, 1990; Eccles & Barber, 1999; Entwisle, 1990; Gerber, 1996; Gilman, 2001; Jordan, 1999; Mahoney, 2000; Mahoney & Cairns, 1997; Marsh, 1992; Nettles, 1991; Steinberg et al., 1996; Zill et al., 1995).

One has to question cause and effect, however. We know that higher performing students are more likely to participate in extracurricular activities. Therefore, are these results due to students' extracurricular participation or pre-existing differences between students themselves? One way to approach this issue is to test the relative strength of different factors in predicting academic outcomes. For example, Camp (1990) found that extracurricular activities are more strongly linked to academic outcomes than study habits, family background or academic ability.

Several studies have followed students over time, allowing researchers to distinguish between the effects of pre-existing differences (like prior grades and family background) and those related to participation in extracurricular activities. One such longitudinal study, which began when students were in seventh grade, found that among at-risk students, "the school dropout rate was markedly lower for students who had earlier participated in extracurricular activities compared with those who did not participate." (Mahoney & Cairns, 1997, pg. 241)

Zill and his colleagues (1995) tested the relationship between risky behaviors and participation in interscholastic sports, school bands, orchestras, choruses, and theatre productions in a national sample of tenth graders. After controlling for student, family and school characteristics, they found that students who participated in arts or music activities were

significantly less likely than non-participants to drop out of school, be arrested, smoke, use drugs, or engage in binge drinking by their *senior* year in high school. Compared to students who spent 5-19 hours per week in school-sponsored extracurricular activities, students who were not involved in any activities were:

- Six times more likely to have dropped out of school by senior year
- Three times more likely to have been suspended in sophomore or senior year
- Twice as likely to have been arrested by senior year
- About 75 percent more likely to have smoked cigarettes or used drugs as either sophomores or seniors

However, extracurricular activities include a wide range of experiences and opportunities for young people. Do all activities produce the same outcomes? Based on surveys of over 1,250 high school students, Eccles and Barber (1999) examined the links between academic outcomes and the following activities: church and volunteer activities, team sports, school involvement, performing arts, and academic clubs. Participation in all five types of activities predicted better high school grade point averages. Participation in sports, school-based leadership, school-spirit activities, and academic clubs predicted an increased likelihood of full-time college attendance. Although sports involvement predicted increases in school attachment, it had a negative effect as well—students involved with sports reported more use of alcohol.

Other studies have also noted mixed or negative effects linked to involvement in sports (for example, Posner & Vandell, 1999). In Zill's study (1995), students who participated in sports were significantly less likely to drop out of school or become smokers by their senior year in high school. Female athletes were less likely to become teen mothers than female non-athletes. However, both male and female athletes were more likely to report binge drinking than non-athletes; and male athletes were more likely to binge drink than female athletes. There was no relationship between sports participation and illicit drug use.

There is further evidence that sports involvement may have different results for female than male students. Participation in sports has been linked to an increase in girls' self esteem,

positive body image, self confidence, and sense of competence, as well as a decreased incidence of depression, sexual activity, pregnancy, and smoking (Alexander & Entwisle, 1996; Jaffee & Manzer, 1992; Sabo, Miller, Farrell, Barnes, & Melnick, 1998; The Women's Sports Foundation, 1998; Zill et al., 1995). Sports programs can promote girls' physical health, as well as increase their positive feelings about their bodies and confidence about their physical and intellectual abilities (Erkut et al., 1998; Erkut & Tracy, 2002; Jaffee & Ricker, 1993; Tracy & Erkut, 2002).

Obviously, we can't assume that the effects of participation in extracurricular activities will be the same for everyone. As noted above, outcomes may vary depending on the participant's age, gender, race, ethnicity, or geographic location. Erkut and Tracy have begun to disentangle the complex interactions between gender, ethnicity and race in their studies of the relationship between effects of physical activity on sexual behavior and self esteem (Erkut & Tracy, 2002; Tracy & Erkut, 2002). In one study, they found that participating in school sports is associated with self-esteem for Cuban boys, Puerto Rican girls, and Mexican-American girls and boys, but not for Cuban girls or Puerto Rican boys. While further research is needed to understand the reasons behind these differences, such results point out the dangers inherent in assuming that any set of findings will apply to all participants.

### ***Comparing Different Uses of Out-of-School Time***

One way to look at the effects of afterschool programs is to compare the outcomes for youth engaged in different types of activities. Jordan and Nettles (1999) analyzed the relationship between six types of afterschool "investment" and the educational outcomes of tenth graders. The afterschool experiences were categorized as structured activities, religious activities, time spent with adults (parents and others), hanging out with friends, paid employment, and time alone. The findings consistently indicated that participation in structured activities, religious programs and time with adults had positive effects on educational outcomes. The only activity with consistently negative effects was hanging out with friends (paid work and time alone had both positive and negative effects).

These findings support the conclusions of other studies that have established the positive effects of constructive afterschool activities (Cooper et al., 1999; Posner & Vandell, 1994; Zill

et al., 1995). They also confirm the potential risks of spending lots of time with peers without adult supervision or monitoring. Students who “hang out” without supervision or engagement in constructive activities are likely to develop negative attitudes towards school and other anti-social or risky attitudes and behaviors (Dryfoos, 1990). While Jordan and Nettles’ research was conducted with a sample of high school age students, research on younger children suggests the findings would probably also apply to middle school students (e.g., Pierce, Hamm & Vandell, 1999). Cooper’s (1999) investigation of the relationship between five afterschool activities and academic achievement included nearly 500 students in grades 6-12 from urban, suburban and rural school districts. Controlling for the effects of student background characteristics like ethnicity, income, gender, and grade level, the researchers found that time spent in structured groups, doing homework and extracurricular activities was positively associated with higher grades and test scores. Time spent working after school was negatively associated with academic achievement.

### **Summary**

Research indicates that most young people who are home alone or on the streets for long periods of time don’t do well. We have also learned that participation in extracurricular activities, which is especially prevalent in high school, results in increases in academic achievement. Formal afterschool programs are often similar to extracurricular activities, but provide adult supervision for more hours in addition to offering a wider range of activities. The next section will explore what we know about the outcomes of afterschool programs and reasons why they may have positive results for youth.

## **VI. Outcomes of Afterschool Programs**

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Are afterschool programs a silver bullet that will solve all of the problems—from juvenile crime to academic failure—of today’s young people? The increased interest in afterschool programs is welcomed, but over inflated expectations may well produce a negative backlash. Although afterschool programs alone can’t solve many problems, we have increasing evidence

that they *can* reduce the incidence of negative outcomes for youth, and at the same time promote the development of engaged, informed, healthy future citizens.

What is the appropriate role of afterschool programs in education? Halpern argues that expectations for academic outcomes can be harmful to the unique, informal nature of child-directed activities in the afterschool context:

... children need times and places in their lives where the adult agenda is modest, if not held at bay; where the emotional temperature is low, and acceptance is generous; where learning is self-directed, experiential, and structured to be enjoyable; where talents can be identified and nurtured; and where possible identities can be explored without risk of failure or ridicule (Halpern, 2000, p. 186)

All children need “down time,” time to dream and structure their own activities, explore and discover without excessive adult intervention or interaction. However, the forces of education reform, combined with safety concerns and a lack of parental supervision during the after school hours, have increasingly moved children’s experiences in another direction. Out-of-school time is being viewed as a resource to be deployed for the greatest possible return. Is there a way for afterschool programs to respond without losing their best qualities?

This section provides an overview of what we know about the effects of participation in afterschool programs. It also attempts to take the discussion a step further by examining what components of these programs result in better grades, improved school attendance, or conflict resolution skills.

### ***Toward a Theory of Change***

A theory of change is an idea about how things work—in this case, how participating in an afterschool program is expected to lead to specific outcomes. The theories proposed in the next few pages address the question: How does participation in afterschool programs promote learning? Theories of change can be helpful in depicting the underlying assumptions about how things connect, allowing us to test ideas so that we can see whether the theory works.

Theories of change are increasingly used in evaluation research and can be effective tools for program planning as well (for example, see Fulbright-Anderson, Kubisch, & Connell, 1998). The theories described below are rooted in ecological systems theory (Bronfenbrenner & Morris, 1998), which posits that individuals develop in a context of families, social institutions, society, and culture, all of which affect the developmental process. The specific theories of change have been developed by the author, based in part on the theory of change developed by Connell and Gambone (1999) and the work of the National Research Council (Connell & Gambone, 1999).

Figure 1 illustrates a simple theory of change for out-of-school time. The assumption is that how students spend their time after school can lead to increased engagement in learning, resulting in better school performance. Studies of the effects of participation in interscholastic sports support Theory of Change A (Broh, 2002; Jordan, 1999). In several studies, sports involvement resulted in increased academic achievement. However, the direct effect of sports was weaker than the effect it had on engagement in learning, which led to better school performance. Engagement in learning in these studies was defined as improved self-concept and increased academic self-confidence.

Not all out-of-school time activities will have the same outcomes, of course. As illustrated in

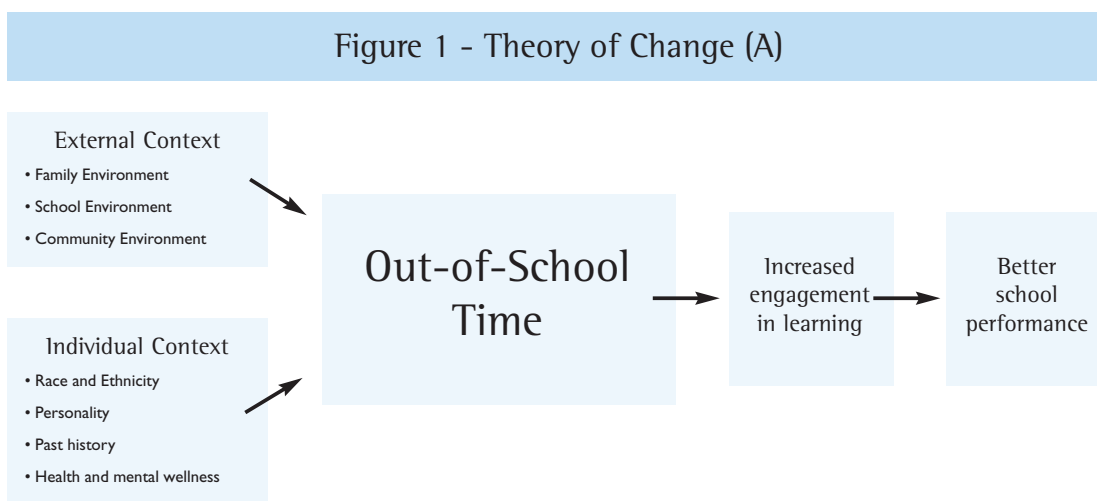
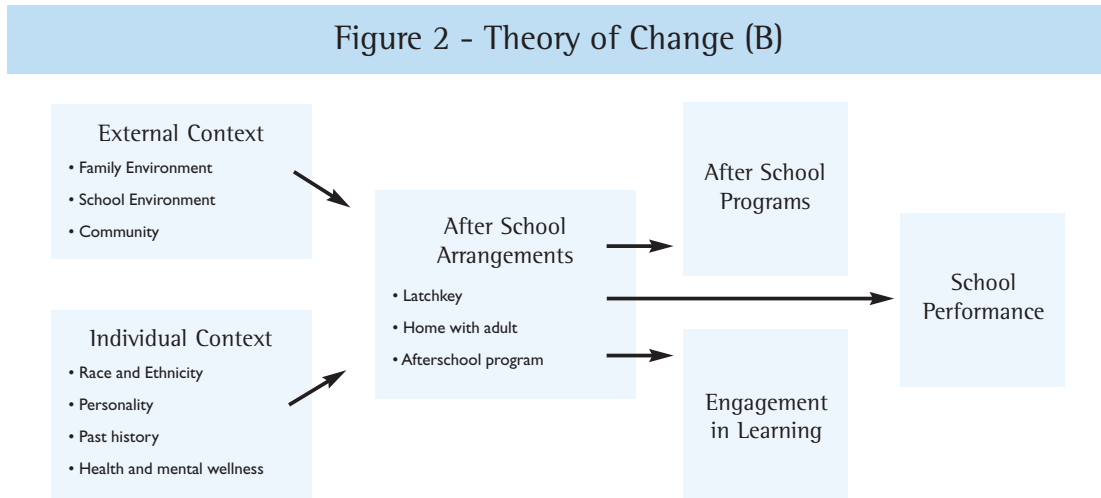


Figure 2, Theory of Change B, the location of children after school can determine the types of activities they engage in. For example, latchkey children are more likely to watch television in the afternoon than children engaged in an afterschool program (Posner & Vandell, 1994). Different activities have different effects on engagement in learning, which in turn affects school performance (Eccles & Barber, 1999; Hofferth & Jankuniene, 2000; Posner & Vandell, 1994, 1999).

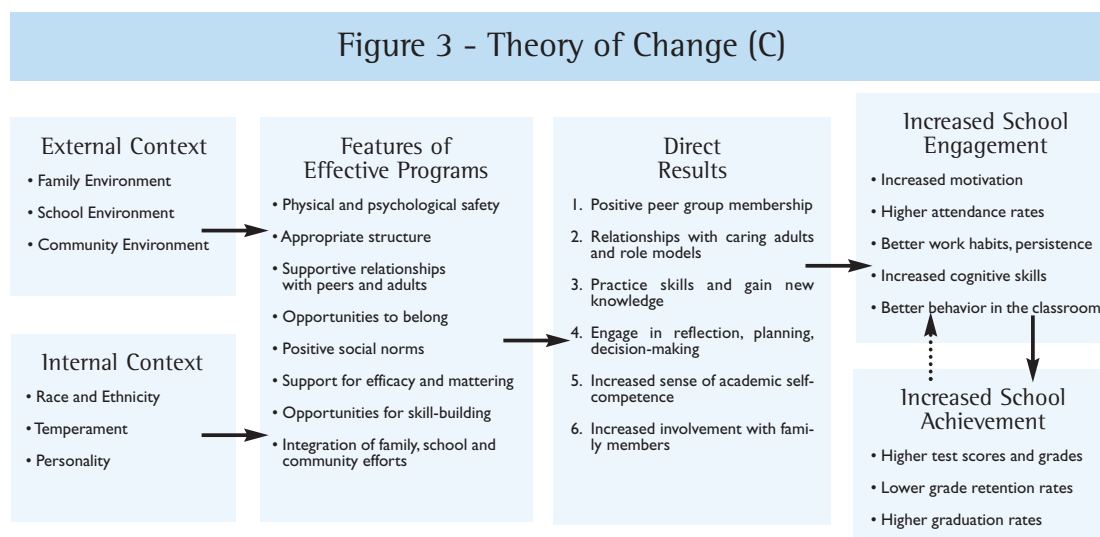


Posner and Vandell (1994; 1999) followed a group of low-income third-graders from third to fifth grade, analyzing the relationship between the children's use of time, after school settings, and outcomes. In third grade, the most common activities the children participated in after school were (in order of average amount of time): watching television, transit, homework or other academic activities, unorganized outside activities, eating, and unstructured indoor activities. However, children who attended afterschool programs spent more time on homework and enrichment activities, more time actively involved with adults, and less time in unsupervised outside play than children in mother care, informal adult supervision (babysitting), or self-care. How children spent their time made a difference in their academic and social functioning: time spent in unorganized outdoor activities was associated with lower grades, and poorer adjustment and work habits. Time in enrichment activities was associated

with better grades, work habits, adjustment, and relationships with peers, while time with adults was associated with improved conduct ratings by teachers and better grades in school (Posner & Vandell, 1994).

These differences continued to affect children’s school performance and behavior in fifth grade, even taking into account their school adjustment and activities in third grade (Posner & Vandell, 1999). For African American children, participating in non-sport extracurricular activities and having strong connections with peers and adults (time spent socializing) were related to better behavior and adjustment in school. For white children, time spent outside in unstructured activities (i.e., hanging out without adult supervision) was related to poorer grades, work habits and emotional adjustment. There is also evidence that activities affect outcomes for older children. Larson studied the relationship between participation in activities by seventh graders and delinquency (1994). He concluded that some, but not all, activities counteract delinquency, and participation in youth organizations, the arts, and hobbies have the most positive effects.

Figure 3 spells out the theory of change in greater detail, specifying the features of effective programs and direct results of intentional programming. Effective programs can provide early



adolescents with the factors identified in Section III associated with engagement in learning. As Theory of Change C indicates, increases in engagement in school are likely to develop into actual changes in behavior and performance over time.

Afterschool programs can promote school success in a number of ways. One primary pathway is the social integration of youth into a group that includes peers, adults and the community at large (Larson, 1994). In addition, through program participation, young people can:

**1. Build meaningful relationships with adults outside their family and gain positive role models**

Structured activities can provide positive adult role models (Quane & Rankin, 2001; Rodriguez, Hirschl, Mead, & Groggin, 1999). From resiliency research,<sup>3</sup> we know that a stable relationship with a caring adult provides the most effective “protection” from the effects of stress for young people (Werner, 1993).

**2. Engage in activities that enable them to learn new things and practice knowledge gained in school**

Engagement in constructive activities can have a direct effect on academic achievement by increasing skills in areas important to school performance. These skills may be content-based, like geometry and reading, or broader “soft” skills like communication and teamwork. Experiences in a subject area, like science, can lead to increased interest in science courses and careers (Campbell et al., 1995).

**3. Engage in reflection, planning, decision-making, and problem-solving**

During adolescence, there is movement from a child’s focus on the present to an adult’s ability to create a structure to reach one’s goals. Studies of the characteristics of effective youth programs have noted the impact of reflective practices on young people’s development (Charney, Crawford & Wood, 1999; Heath, 1994; Larson, 1994; McLaughlin, Irby & Langman, 1994).

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<sup>3</sup> See Appendix A for a brief summary of resiliency research.

#### **4. Become attached to a group of peers who have positive aspirations**

Through participation, students develop membership in a peer group that provides a common set of experiences, goals and personal interactions that influence identity. Creation of a peer group of similarly interested peers can have a powerful influence on the achievement and school orientation of young people (Eccles & Barber, 1999; Gerber, 1996; Larson, 1994; Mahoney, 2000; Steinberg et al., 1996). Troubled adolescents often affiliate with other deviant youth; if participation includes this social network and changes it, or links the young person to a new pro-social peer group, one observes a reduction in antisocial behaviors and increased engagement in school (Mahoney, 2000).

#### **5. Find a “border zone” between the cultures of home and school that provides them with pathways to mainstream society at the same time respecting their identity**

Inner-city youth are familiar with the skills needed to survive on the street. Effective afterschool programs help youth learn skills they will need in mainstream society—from working with technology to communication skills—in a context that makes the importance and usefulness of such knowledge apparent (Catalano et al., 1998). Programs create space for young people to reflect on society, acknowledge social problems like racism in a pro-active context, and build the skills needed to counteract them (Heath, 1994). Finally, programs find ways to include the culture, values, norms, and family members of participants, creating an integrated space where many parts of their world can come together (Comer, 1988).

#### **6. Transfer positive experiences in a school-based program to more positive feelings about school itself**

For many low-performing students, school has been an overwhelmingly negative experience. At a time when disengagement from school increases abruptly, middle school afterschool programs can provide an incentive for students to attend school and begin to make links between school-based expectations and their future work

and life goals. Positive learning experiences in afterschool activities and programs, particularly if they are school-based, can bring about a more positive identification with school (Gilman, 2001; Marsh, 1992).

### **7. Increase the sense of themselves as learners.**

When students build proficiency in one area, like athletics, their self-confidence increases, which can transfer to other aspects of their lives including school (Jordan, 1999). Participation in out-of-school time programs and activities can also increase a student's academic self-concept, which can positively affect school performance (Gerber, 1996; Larson, 1994; Marsh, 1992; Rodriguez et al., 1999).

### **8. Increase the involvement of family members in their lives.**

Family members are often involved in students' extracurricular activities (Broh, 2002; Larson, 1994). Parents come to performances, games and other events. They also provide support in the form of transportation, selling tickets, timing swim meet heats, and the myriad other "invisible" tasks involved in many youth activities. When parents are involved in an activity like creating costumes for a theater performance, it can promote bonds between generations. These public events and the programs that sponsor them provide a way for early adolescents to receive recognition from family members, as well as provide a topic for conversation. Parents may also increase their communication with other parents and school personnel due to attendance at events, meetings and performances related to the program.

### ***Formal Afterschool Programs***

We have reviewed the research on self-care and extracurricular activities. Formal afterschool programs are the focus of this report, however. In the past few years, research has increased dramatically and much has been learned about the effects of afterschool programs. Now we will look at the evidence that they can make a difference in children's lives.

Program effects fall into three major categories: reduction of negative behavior, increases in

behaviors and attitudes linked to school success, and increased academic performance (see Table 4). Many studies have found outcomes in several of these areas.

Table 4 - Outcomes of Formal Afterschool Programs

**Reducing Negative Behaviors:**

- Reduced juvenile delinquency (Jones & Offord, 1989; Schinke, Orlandi & Cole, 1992; Warren, Feist, & Nevarez, 2002)
- Decreased substance abuse (James & Wabaunsee, 1995; Jones & Offord, 1989; Richardson et al., 1993; Schinke et al., 1992)
- Reduced conflicts between youth (Riley, Steinberg, Todd, Junge, & McClain, 1994; Warren et al., 2002)
- Reduced dropout rates (Cardenas, 1992)
- Reduced school suspensions (Johnson, Zorn, Williams, & Smith, 1999)
- Decreased school vandalism (Riley et al., 1994)

**Increases in Attitudes and Behaviors Linked to School Success:**

- Increased sense of efficacy, competence and leadership (Campbell et al., 1995; Fleming-McCormick & Tushnet, 1996; Heath & Soep, 1998)
- Better behavior in school (Baker & Gribbons, 1998; Johnson et al., 1999; Posner & Vandell, 1994)
- Better emotional adjustment (Baker & Gribbons, 1998; Kahne, Nagaoka, O'Brien, Quinn, & Thandiede, 1999; Marshall et al., 1997)
- Better use of time (e.g., less time watching television, more time in enrichment and academic activities) (Johnson et al., 1999; Posner & Vandell, 1994)
- Better work habits (Schinke et al., 1992; Vandell & Pierce, 1999)
- Better conflict resolution skills (Carlisi, 1996; Posner & Vandell, 1994; Rodriguez et al., 1999; Vandell & Pierce, 1997; Warren et al., 2002)

- Fewer absences from school (Huang, Gribbons, Kim, Lee, & Baker, 2000; Johnson et al., 1999; Schinke, Cole & Poulin, 1998; U.S. Department of Education, 2003; Vandell & Pierce, 1999)
- Higher educational aspirations (Brooks, 1995; Heath & Soep, 1998; Huang et al., 2000; Rodriguez et al., 1999; Roth, Brooks-Gunn, Murray, & Foster)
- Improved attitude toward school (Brooks, 1995; Huang et al., 2000; Schinke et al., 1998; Schlegel, 2003)
- Improved relationships with parents or parent involvement (Schwager, Garcia, Sifuentes, & Tushnet, 1997; U.S. Department of Education, 2003)
- Greater feeling of belonging in the program or community (Schlegel, 2003; Schwager et al., 1997; Warren et al., 2002)

### **Improved Academic Performance:**

- Improved skills in data analysis and writing (Schlegel, 2003)
- Improved homework completion or quality (Carlisi, 1996; Johnson et al., 1999)
- Improved grades (Baker & Witt, 1996; Brooks, 1995; Cardenas, 1992; Carlisi, 1996; Hamilton & Klein, 1998; Hamilton, Le & Klein, 1999; Schinke et al., 1992)
- Higher scores on achievement tests (Hamilton & Klein, 1998; Hamilton et al., 1999; Huang, 2001; Huang et al., 2000; Johnson et al., 1999)
- Reductions in grade retention (Hamilton et al., 1999)
- Decreased dropping out of school (Jones & Offord, 1989)

### ***Programs for Elementary School Students***

Most evaluations of afterschool programs focus on elementary school-age children because the majority of programs serve this age group. In the 1980's, two types of studies on the effects of program participation began to be conducted. One type examined changes in school achievement associated with participation in an afterschool tutoring or skill-building program, models that are the precursors of extended learning programs. Another group of studies

focused on the effects of participation in school-age care programs on a variety of developmental outcomes. Studies that focused on academic programs and results typically evaluated programs for low-income children, while more developmentally oriented studies tended to have middle-class samples.

Several studies in the 1980's found that low-income children attending academically-oriented afterschool programs increased their academic skills and test scores (Entwisle, 1975; Mayesky, 1980; Sheley, 1984). However, studies of middle class children attending school-age care programs during the same period found mixed results (Howes et al., 1987; Vandell & Corasaniti, 1985). Two more recent studies found no differences between middle class children who attended programs and those who did not (Marshall et al., 1997; Pettit, 1997).

The results from more recent studies may be attributable to different program types or quality. Because the studies compare children who are attending the program with non-participating children, however, differences between the social contexts of higher and lower class children can affect the results. Low-income children typically have few constructive alternatives to afterschool programs. On the other hand, middle class children who don't go to a specific program are still likely to be engaged in similar kinds of extracurricular and enrichment activities, and are receiving the same developmental support as children in programs.

We know from a number of different studies that participation in some afterschool programs results in increased academic outcomes (Baker & Witt, 1996; Brooks, 1995; Carlisi, 1996; Hamilton & Klein, 1998; Huang et al., 2000; Schinke et al., 1998). For example, early evaluations of the LA's BEST afterschool program, which currently serves over 18,000 elementary students at 104 sites throughout the city, found that children in the program "...have higher expectations of themselves and have greater motivation and enthusiasm for school. Such effects can result in significant later dividends." (Huang et al., 2000, appendix pg. 18).

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

Most studies of academic outcomes have focused on low-income children; children attending low quality schools; and/or children who are performing poorly prior to participation in an afterschool program. Although these studies indicate generally positive results, evaluations have only recently tracked results for large numbers of children over the course of several years. These new studies provide the best opportunity to examine what afterschool programs can do (Huang et al., 2000; University of California Irvine, 2002).

A retrospective study by the UCLA Center for the Study of Evaluation examined data from 20,000 children attending 24 LA's BEST elementary schools from their initiation into the program through fifth grade (Huang, 2001). Children who participated over the long-term (at least four years) had higher school attendance rates in middle and high school than their peers. Higher attendance at school led to higher academic achievement on standardized tests in math, reading and language arts. In addition, LA's BEST participants were more likely to achieve English proficiency, an outcome with important implications in a city with a high proportion of non-native speakers.

Researchers at the University of California-Irvine are evaluating California's statewide afterschool program known as the Before and After School Learning and Safe Neighborhood Partnerships Program (B/ASLSNPP)(2002). Although this program is controversial, largely due to the low levels of funding provided (\$5.00 per child per day), researchers have access to an unprecedented amount of data. The data includes information on nearly 100,000 children in grades K-7, including SAT-9 scores, California's annual testing program.

Between 2000 and 2001, the percentage of children involved in B/ASLSNPP who scored above the 25th percentile in Reading on the SAT-9 increased 4.2 percent compared to a 1.9 percent increase statewide (University of California Irvine, 2002). These differences built on gains that were made in the 1999-2000 school year, the first year of the grant program. In more detailed research on a subgroup of participants, researchers found that three groups gained the most from enrollment in B/ASLSNPP: English language learners, low-performing students, and students who had high participation rates. These groups had larger increases in school

attendance and SAT-9 scores, and greater decreases in suspensions than a similar group of non-participating students (University of California Irvine, 2002).

It is important to note that a number of afterschool studies found little or no effect on direct academic results (test scores and grades), but did find improved attitudes towards school, better relationships with family members, and more optimistic perceptions of life chances (Jordan & Nettles, 1999; Scales, 1999; Schwager et al., 1997; Trousdale, 2000; Witt, 2001). As noted in the theory of change (see Figure 3), we have reason to expect that such changes will lead to academic improvements over the long run.

One of the challenges of afterschool evaluation is the difficulty of creating a comparison group. Without a control or comparison group, it is difficult to attribute outcomes to participation in the program. Yet, if the comparison group children are attending other afterschool programs or engaged in many extracurricular activities at school and in the community, evidence of program effects will be minimized (see Appendix B for a more complete explanation of these issues). As a result, some researchers have created “within program” comparison groups, whereby youth with low participation rates are compared to those who attend a program regularly over a relatively long period of time (Baker & Witt, 1996; Baker & Gribbons, 1998; Huang et al., 2000; Vandell & Su, 1999; Witt, 2001).

For example, Witt (2001) categorized his sample of third through sixth graders into three categories: program participants (PARD), high-adult supervision non-participants (HAS), and low adult-supervision non-participants (LAS). Children in the PARD group increased significantly on scales of conflict resolution, sense of academic competence and sense of self-worth, while the HAS and LAS children increased only slightly or not at all. It is notable that LAS children’s scores decreased in several cases, especially on measures related to self-esteem.

When resources are invested in afterschool programs, less is available for other services and programs. If we are to make the case for public funding of programs, knowledge about the

long-term effects of programs, and their attendant costs or savings, is extremely helpful. Cost-benefit studies of early childhood programs have documented the potential for significant long-term savings due to lower costs for special education, involvement with the juvenile justice system, welfare, and higher contributions in the form of employment taxes (Schweinhart, Barnes & Weikart, 1993). We don't yet have this sort of research on afterschool programs. We do, however, have increasing evidence that the benefits of afterschool outweigh the costs (Brown, Frates, Rudge, & Tradewell, 2002; Huang et al., 2000; Riley et al., 1994).

Our first documentation of cost savings from program participation is from a study in the early 1990's. Riley and his colleague asked teachers and principals to report the number of children who had not been retained in grade or referred to special services due to the child's participation in the afterschool program (Riley et al., 1994). The researchers concluded that the 64 participating schools had saved over \$1,000,000 during a one-year period. More recently, University of California-Irvine researchers (2002) compared the number of low-performing B/ASLSNPP students who were retained in grade compared to the general school population. They projected cost savings of over \$11 million in 2001-2002 alone.

Analysts at the Rose Foundation in California were contracted by the Afterschool Alliance to calculate the benefits associated with the state's new *After School Education and Safety Program Act of 2002* (Brown et al., 2002). Brown and his colleagues estimated high and low ranges of long-term cost savings due to higher graduation rates, reduced child care costs, increased compensation (since high school graduates earn more and pay more in taxes), reduced crime, and reduced welfare participation, as well as the cost of additional schooling for more students (since the drop-out rate is lower for program participants). While these numbers are preliminary, since the researchers had to base their estimates on early childhood and crime prevention programs as well as afterschool research, the estimated savings ranged from \$8.90 to \$12.90 for every dollar spent on the program. Even if savings from crime reduction are excluded, the program is still estimated to save from \$2.99 to \$4.05 for every dollar spent.

### ***Middle School Programs***

Evaluations of afterschool programs overwhelmingly focus on providers serving elementary-school children, who comprise the vast majority of participants in formal programs (Seppanen et al., 1993). On the other hand, prevention research has focused on teens (Dryfoos, 1990; Mahoney & Cairns, 1997; Schinke et al., 1992; Weissberg & Greenberg, 2000; Witt, 1997b, 2001). Studies of the effects of programs designed to reduce involvement in risky behaviors have described outcomes like reduction in substance abuse, drug trafficking, crime, and dropping out of school, as well as increases in conflict resolution and problem-solving skills.

Middle school students have been left out—they are often too young for youth development programs and too old for school-age care. Growing awareness of this gap in services and a surge of support for afterschool opportunities has resulted in considerable increases in programming for early adolescents. We now have several evaluations of these newer programs that document improvement in academic outcomes, attitudes toward school, relationships with family members, and better long-term development (Baker & Witt, 1996; Gaynor & Horowitz, 1997; Heath, 1994; Johnson & Dooley, 1999; Trousdale, 2000; Vandell & Pierce, 1997; Walker & Arbreton, 2002).

The UC-Irvine evaluation of the B/ASLSNPP grantees described earlier included both middle and elementary school students. Middle school students reported changes in their attitude towards school. Administrators believed that students felt more positively toward school due to their enthusiasm about the program. It should be noted that non-participants frequently showed *declines* in performance over the same period (Baker & Witt, 1996).

A report by the San Francisco School District (Trousdale, 2000) describes the implementation and early outcomes of a 21st Century Community Learning Center (CCLC) program operating in four middle schools in the district. The CCLC program provides federal grant money for afterschool programs throughout the United States with the stated goal that participants will demonstrate educational benefits. This study documents the high level of effort and collaboration required to create successful programs. Principals, center directors,

the CCLC coordinator; and department representatives from the Office of Youth Development and Support Services met each month to plan the program, develop a governance structure, oversee implementation, identify best practices, and discuss other issues as necessary. Programs provided homework help, tutoring, and enrichment activities designed to build students' overall school experience. Incentives like a rock-climbing trip were used to reward those who participated on a regular basis. The evaluator reported strong buy-in and support from both parents and participants. Parents felt the program succeeded in helping children complete homework, improve their attitude toward school and their behavior in school.

North Carolina is the only state that has a publicly funded afterschool program specifically for middle school students. Support Our Students (SOS) serves over 13,000 students at 200 sites across the state. One of its goals is "to improve academic performance of middle school youth and increase their commitment to school and the educational process" (Johnson & Dooley, 1999). An evaluation of participants in one county serving nearly 300 students at seven sites found that students who participated for both years the program was offered increased their reading and mathematics scores on the North Carolina End-of-Grade tests. In addition, the percentage of second year participants working above grade level increased, and the percentage of participating students who passed their courses increased in every subject with the exception of science (Johnson & Dooley, 1999).

The San Francisco Beacon Centers in eight schools use a youth development approach and provide young people with a variety of education enrichment, arts activities, leadership opportunities, and tutoring programs (Community Network for Youth Development, 2001). Most of the participants are middle school students. A recently published evaluation (Walker & Arbretton, 2002) found that the Beacon Centers were particularly effective in attracting high-risk students who were most in need of academic support. High participation rates (over 30 days per year) were correlated with significant improvement by all of the students studied in math and reading scores on standardized tests.

Witt (1996; 1997a; 1997b; 2001) explicitly employs a resiliency framework in his program

evaluations. He has developed and tested a “Protective Factors Scale” based on resiliency research as described in Table 5. Participants in a Parks and Recreation Arts Program in Texas were 9 to 16 years old, with 70 percent between the ages of 12 and 16. Participants who completed pre- and post-test questionnaires (N=24) demonstrated statistically significant increases in four protective factor areas: knowledge of and interest in utilizing neighborhood resources; a sense that there are interested, caring adults who want to work with them; a sense that being able to work with others is important; and the ability to work out conflicts (Witt, 1997a).

Table 5 - Results of Participation in Afterschool Programs

**“Protective Factors Scale Domains,”  
developed by Peter Witt, Texas A&M University**

1. Neighborhood Resources: Knowledge of and interest in utilizing neighborhood recreation opportunities, including organized and informal programs and opportunities
2. Interested and Caring Adults: The perception that there are adults who care about and are interested in children and are available to help children when they have problems
3. Sense of Acceptance and Belonging: The perception of being liked and accepted by other children and/or family members
4. High Controls Against Deviant Behavior: The understanding that it is important and necessary to stay out of trouble and obey the rules
5. Models for Conventional Behavior: Respect for and appreciation of children, adults and institutions that model or reinforce appropriate behavior

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

6. **Positive Attitude Toward the Future/Future Expectations:** Perception of oneself as having a positive future and being willing to work to achieve goals; being willing to be spontaneous and creative, and understanding that one has some control over the outcome of daily events
7. **Value of Achievement:** Interest in and understanding of the importance of doing well in school; also includes the general idea of being successful and trying to do one's best in any area of involvement
8. **Ability to Work with Others:** Understanding the importance of and having the ability to get along with peers, cooperate, and be a good member of a team or group
9. **Ability to Work Out Conflicts:** The ability to deal in a positive manner with problems that arise with other children

The third to fifth graders in Vandell's in-depth evaluation of a four-site program serving low income children are just below the age of early adolescence (Vandell & Pierce, 1997). These programs had an intentional focus on enhancing children's physical and cognitive skills, teaching conflict resolution strategies, and increasing children's skills in positive group interaction. Over the course of one year, children participating in the afterschool programs improved their classroom work habits and school attendance, and had fewer problem behaviors than the children in a comparison group. In a similar study comparing program participants and non-participants in grades three to six, Baker and Witt (Baker & Witt, 1996) found that the students who participated in the program significantly increased their grades even when the researchers added statistical controls that took into account factors like previous grades, family background, gender, and age.

Heath, McLaughlin and their colleagues (1994; 1994) carried out a multi-year, ethnographic inquiry into the characteristics of effective youth programs. Chosen on the basis of recommendations from key informants, many of the programs served middle and high school students. Youth who stayed in the programs for more than two years reported increased self-control and self-respect, less involvement with crime and violence, and stronger hope and expectations for their future (Heath, 1994).

Boys & Girls Clubs, located in low-income urban neighborhoods and public housing developments, serve youth from 8 to 17 years old in open enrollment (drop-in) programs. In the past few years, Boys & Girls Clubs around the country have implemented Project Learn.<sup>4</sup> Based on the work of researcher Reginald Clark (1988), Project Learn provides a weekly menu of “high-yield learning activities” for participants, including the following: four to five hours of discussion with adults; one to two hours of writing activities; four to five hours of leisure reading; five to six hours of homework or studying; two to three hours of helping others; and four to five hours playing games using cognitive skills. The Project Learn program evaluation found that participating youth had more enthusiasm and engagement in learning, higher overall grades, and their teachers reported they performed better in reading and writing. These results, initially demonstrated after seven months of program implementation, were repeated after 18 months and again after 30 months (Schinke et al., 1998).

### ***Who Benefits?***

Not all students are likely to experience the same effects as a result of their enrollment in an afterschool program. A truism in the field might be that those who need the most, benefit the most. Students who are low-income, or have low school attendance, limited English proficiency, or poor test scores show the greatest gains linked to participation in afterschool programs (Huang et al., 2000; Marshall et al., 1997; Posner & Vandell, 1994, 1999). Disadvantaged students are likely to benefit for two reasons—they need the support provided by quality youth programs the most, and they are unlikely to find those supports elsewhere in the community.

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4 Previously referred to as the Educational Enhancement Program.

In the UCI study of California’s Before and After School Learning and Safe Neighborhoods Partnerships Program (Huang et al., 2000), students who were in the lowest quartile of achievement test scores initially improved the most, and students with the highest school absence rate prior to attending the program showed the greatest gains. Deborah Vandell’s research on children in a variety of communities indicates that low income youth—who otherwise may have no constructive activity choices during out-of-school hours—are especially likely to benefit from participation (Posner & Vandell, 1994; Vandell & Corasaniti, 1985).

No matter what a student’s background is, however, he or she is only likely to benefit from a program that provides enough “dosage”—that is, an adequate number of hours over a significant period of time. Most investigations into this issue confirm that students who participate the most, gain the most from afterschool programs (e.g., Baker & Witt, 1996; Huang et al., 2000; Rodriguez et al., 1999; U.S. Department of Education, 2003; Vandell & Pierce, 1997).<sup>5</sup> If a student signs up for a program, but rarely participates, he or she is unlikely to receive substantial benefits. Similarly, program intensity matters—activities that are offered for only a few hours or over a short period of time don’t have much chance to produce lasting positive effects on youth. In one study of two afterschool programs, only students who participated at least 50 percent of the time demonstrated positive academic outcomes (ERIC Clearinghouse on Disabilities and Gifted Education, 2001).

In a recent report on a study of four school-sponsored programs, Vandell and Pierce (1997) found that children with higher participation rates (attending more days during the school year) had better work habits, greater ability to work well with others in the classroom by the end of the year, were less likely to support aggression as a conflict resolution strategy, and attended school more often than children who participated less frequently. An evaluation of

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<sup>5</sup> In the recent Department of Education study of 21st Century Community Learning Centers conducted by Mathematica Policy Research, frequent attendance affected the outcomes for elementary students, but not middle school students, who tended to have very low attendance in the program.

Jesse Jackson's PUSH program in Chicago found that students who had high levels of participation were more likely to graduate from high school, have a high sense of personal control, a positive academic self-concept, and make more efforts to achieve their future goals (Nettles, 1991). Heath (1994) found that youth who stayed in the programs for two or more years reported increases in self-control and self-respect, were better at avoiding criminal and violent elements in their neighborhoods, and, perhaps most importantly, had stronger hopes and expectations for their own futures.

### **Summary**

Much remains to be learned about the effects of afterschool programs, but there is sufficient evidence from both small and large evaluations—from developmental research studies and studies of children of different ages in different types of programs—that afterschool programs can and do make a positive difference in the lives of young people. Not surprisingly, the effects of program participation are strongest for those students who need help most and have the fewest options. The evidence that dosage matters—those who attend the most hours over the most years benefit more than participants who come less often or over a short period of time—is a strong indicator that afterschool programs make a difference.

The benefits of participation in quality afterschool programs do not only accrue to the individual. As we saw in the discussion of cost-benefit studies, families and society as a whole gain as well. Results like reducing the number of children who are held back has important long-term implications, since retained children are much more likely to drop out of school prior to graduation. Reduced crime rates mean lower costs for the protection and security infrastructure, as well as lower costs to victims (which are harder to calculate and therefore were not included in the Rose Foundation report). In addition, working parents whose children are being supervised during out-of-school time are able to be more productive, work more hours, and move into better jobs (Johnson et al., 1999).

Despite these important findings, however, we can't assume that every program will be beneficial for participants. Programs that do not have enough staff, or poorly trained and

supervised staff, or don't have adequate facilities, are hard-pressed to help children make the kinds of gains documented in this report. Subjecting low-performing students to basic skills remediation may not prove effective. Purely recreational or social programs are unlikely to result in short-term gains in specific academic skills. How can programs engage youth, support their development, and guide them toward school success? What kinds of programs are most effective for middle school children? The next section explores the answers to these questions.

## VII. Program Strategies

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School-age care programs typically provide a range of activities and allow children a fair amount of choice on what they do from day to day. Youth development programs include community centers and Boys & Girls Clubs that offer a range of activities, and other programs geared toward teens with specific interests, needs or talents. Educational programs may look similar to tutorials or regular school days, or they may utilize strategies like service learning projects to build skills. While a comprehensive review of all of the strategies employed by afterschool programs is beyond the scope of this report, the next section reviews what we know about the effects of some of the most commonly pursued afterschool program strategies that incorporate active learning—arts education, tutoring, mentoring, project-based learning, and experiential education.

### ***Experiential Education***

“Experience serves both as a source of knowledge and as a process of knowing.”

(Conrad & Hedin, 1982, pg. 69)

One of the major distinctions between in-school and out-of-school time approaches to learning is the emphasis of the latter on hands-on, experiential learning. Experiential learning includes project-based learning, adventure education, apprenticeships, and service learning. Such experiences can provide students with opportunities to practice what they have learned in school, develop new skills, test themselves as leaders, broaden their horizons, and increase

their expectations for their future, (Clark, 1990; Conrad & Hedin, 1982; Curtis, 2002; Dubas & Snider, 1993; Gager, 1982; Hattie, Marsh, Neill, & Richards, 1997). A national study of experiential education programs conducted in the 1980s found increases in participants' sense of competence and performance, positive attitudes toward adults, and problem-solving ability (Conrad & Hedin, 1982).

Simply having an experience is not enough to guarantee that one is learning, however. An experiential education program should include structured events that require participants to respond, so that they learn by applying new skills to a concrete task. In experiential learning, participants are often able to judge for themselves the success of their efforts, based on their experience with the results (e.g., a poorly packed backpack is uncomfortable). Finally, and perhaps most importantly, the program must provide time for critical analysis and reflection, verbally and in writing (Conrad & Hedin, 1982; Conrad & Hedin, 1991; Gager, 1982; Scales, 1999). If experiential education is expected to have an effect on academic outcomes, it should be explicitly tied to desired academic results through integration across the curriculum. It should also include communication with regular school teachers (Scales, 1999).

### ***Project-Based Learning***

Project-based learning, an increasingly popular but relatively new model of experiential learning, is defined in a number of different ways (Curtis, 2002; Seidel, 2002; Thomas, 2000; Wolk, 2001). However, certain themes flow through these descriptions:

Projects are complex tasks, based on challenging questions or problems, that involve students in design, problem-solving, decision making, or investigative activities; give students the opportunity to work relatively autonomously over extended periods of time; and culminate in realistic products or presentations (Thomas, 2000, p. 1).

Most evaluations of project-based learning have focused on classroom efforts. Strong research evidence points to the effectiveness of this approach in increasing students' achievement test scores, problem-solving skills, critical thinking skills, ability to make connections across academic disciplines, cooperative teamwork skills, planning capabilities, and enhanced attitudes

toward learning (Curtis, 2002; Thomas, 2000).

Seidel's (2002) recent paper explores the potential role of project-based learning in afterschool programs. Project-based learning seems a good fit with the kind of active, hands-on learning promoted for the after school hours, as distinct from the passive, didactic approach of many school-day classrooms. "...project-based learning offers students the opportunity to discover that learning...can be interesting and stimulating, that everyone can bring expertise and insight to the group, and that work and learning can be fun (Seidel, 2002, p. 9). Especially for the many poor children who have not been well served by traditional schooling (Soto, 1990), project-based learning may represent a unique opportunity to enhance engagement in learning through authentic exploration of interesting issues and ideas.

However, as Seidel (2002) points out, many challenges stand in the way of successful adoption of project-based learning by most afterschool programs, including a lack of sufficient training opportunities and planning time for staff; poor communication between school and afterschool faculties; staff concerns about being held accountable for academic performance and assessment of learning; high turnover of afterschool staff; and lack of access to plentiful information on the why, how, and what of project-based learning.

### ***Adventure Education***

Adventure education programs like Outward Bound have been the subject of numerous evaluations over the years (for reviews, see Cason & Gillis, 1994; Hattie et al., 1997). Hattie's review of 96 studies found significant short and long-term positive effects on leadership, self-concept, academic performance, assertiveness, achievement motivation, social competence, cooperation, and interpersonal communication. Participants in programs that lasted over a longer period experienced stronger outcomes than those participating in short programs. Hattie notes:

The effects on academic performance—both general academic gains such as problem solving and direct effects such as mathematics scores—are most impressive. The direct effects should not be generalized to all adventure programs, as most of them...are from

programs where the aim is to improve academic skills...The effects of general academic competencies, however, come from many programs, and thus it can be claimed that adventure programs enhance general problem solving competencies...(Hattie et al., 1997)

### ***Service Learning***

While no single definition of service learning exists, primary components of service learning activities include active participation in structured activities in the community, academic curriculum integration, building of skills and competencies, and opportunities for reflection (Billig, 2000). Service learning is particularly popular among afterschool programs for middle school students. Community service can increase students' interest in school at a time when boredom with school is especially high (Steinberg et al., 1996). According to the National Center for Education Statistics (2000), 38 percent of middle school students are now engaged in some kind of service learning.

Research on school-based service learning programs indicates these programs, when well implemented, support academic success, civic engagement, improved self-concept, a sense of social responsibility, better school climate, and a decrease in risk-taking behaviors (Billig, 2000; Conrad & Hedin, 1991; Hattie et al., 1997; Moore & Allen, 1996; Youniss & Yates, 1997). Community service experiences seem to be especially effective with middle school students. In a Search Institute study of over 1,000 sixth through eighth graders, those who participated in service learning had increased civic awareness (i.e., a sense of duty to help others and a sense that they could make a difference when helping others), grades in school, and commitment to school work (Scales, 1999). Moore and Allen (1996) found that programs that offer youth opportunities to feel needed in the community and achieve a sense of responsibility, along with school-based support, are related to improvements in social and academic arenas.

### ***Mentoring and Tutoring***

Mentoring programs fit well with young adolescents' need to develop resiliency through a stable relationship with caring adults (Garmezy, 1991; Masten et al., 1990; Werner, 1993).

Mentoring creates a relationship by pairing an unrelated adult volunteer with a young person who might not otherwise have access to adequate adult support and access to social networks (Thompson & Kelly-Vance, 2001). Mentoring programs have been linked to a variety of academic outcomes, including better attendance, increased probability of going on to higher education, and improved attitudes toward school (see Jekielek, Moore, Hair, & Scarupa, 2002 for a review).

A rigorously designed evaluation of the Big Brothers/Big Sisters Program (Tierney et al., 1995) found significant positive effects for young people in a number of areas, including academics, after 18 months of participation. Participants improved their school attendance and performance and had more positive attitudes toward completing schoolwork. They were also less likely to be involved with drugs or alcohol, less likely to engage in violent behavior, and had improved their relationships with peers and parents. Other evaluations with weaker research designs or smaller samples have reported similar results (e.g., Hamilton & Fenzel, 1988; McLearn, Colasanto & Schoen, 1998; Slicker & Palmer, 1993; Thompson & Kelly-Vance, 2001).

Although some programs, like Big Brothers/Big Sisters, focus solely on mentoring, others integrate mentoring with other activities. Apprenticeships are one approach to forming mentoring relationships in the context of afterschool programs. Youth spend a semester or more apprenticing with an adult volunteer in a combination of experiential learning and mentoring activities. Citizen Schools in Boston has engaged thousands of middle school students at its 12 school-based programs in apprenticeships that result in products and productions like mock trials, web page designs, refurbished computers, and children's books:

Each week, almost 1,000 middle school students—most from low-income households—participate in up to 16 hours of engaging, hands-on learning activities. *Citizen Schools* “apprentices” work on engaging, real-world projects designed to improve their skills in writing and data analysis. They participate in “apprenticeships” taught by adult volunteers, who share *their* expertise and professionalism through 10-week projects that culminate in a final product or performance. Apprentices also work on homework and participate in

team-building activities under the guidance of *Citizen Schools* staff. Finally, participants learn about local educational and cultural resources through “explorations” to institutions in the surrounding community. (Schlegel, 2003 p. 1)

Tutoring programs provide a one-to-one experience to help youth achieve improved academic performance. Low-performing students can significantly increase their reading skills with the help of tutors (Morris, Shaw & Perney, 1990). In a review of 65 independent evaluations of tutoring programs, Cohen and his colleagues concluded that tutoring programs have positive effects on the academic performance and attitudes of both the tutors and students (Cohen, Kulik & Kulik, 1982). In fact, some youth development programs focus on benefits that can accrue to the tutors themselves. In the Valued Youth Partnership Program (Cardenas, 1992), high school-age tutors increased their reading grades, improved their attitude toward school, and reduced their dropout rates, compared to a comparison group (Appalachia Educational Laboratory, 1990).

What makes a tutoring program successful? Positive outcomes depend on the quality and preparation of the tutors as well as characteristics of the students. Wasik and Slavin (1993) found that in order to reach desired results, non-certified staff needed high quality training, and programs needed to be highly structured with resources like manuals and student materials. As Wasik (1997) notes, being able to read does not necessarily translate to being able to teach someone else to read. On the other hand, recent research by Fitzgerald (2001) suggests that extensive preparation may not always be required; she found that “minimally” trained college students working on a regular basis with at-risk students could effect statistically significant reading gains over a six-month period.

### **Arts Education**

In a long-term qualitative study of effective youth programs across the United States, Heath and McLaughlin (1994) found that arts programs were often exceedingly effective in engaging young people:

Learning in the arts for these young people captures their imaginations, talents, and social

commitments. By occupying responsible roles in programs that focus on the visual, performing, and media arts, young people develop organizational skills, sound budgeting strategies and the capacity to communicate with adults...opportunities for young people to learn derive primarily from an ethos that actively considers them to be resources for themselves and for others, through highly participatory projects that encompass listening, writing, and reading, as well as mathematical, scientific and social skills and strategies. (Heath, Soep & Roach, 1998, p.2)

Youth who spend a sustained period of time in arts programs (defined in one study as three afternoons per week or more) spend more time reading for pleasure, have higher mathematics and reading achievement, as well as greater involvement in the school and larger community, higher expectations for their future, and an ability to plan for their future (Catterall, Chapleau & Iwanaga, 1999; Heath & Roach, 1999; Heath et al., 1998). Current research provides particularly strong evidence of a positive transfer from arts experiences to academic skills in three areas: music listening and spatial reasoning; music instruction and spatial reasoning; and drama and verbal skills (Podlozny, 2001; Winner & Hetland, 2000).

Arts programs are able to engage young people of all backgrounds, including low-income youth and those who have been alienated from school. In fact, as with other areas, low-income youth may have the most to gain from their involvement in the arts (Heath & Soep, 1998; McLaughlin et al., 1994; Oreck, Baum & McCartney, 1999). Less is known about *how* art experiences transfer to the academic environment. Possible explanations include development of particular cognitive skills (e.g., communication, observation and critical thinking skills); greater identification with and connection to a caring adult; experiencing competence in one area increases motivation to engage in other learning activities; changes in students' attitudes toward learning; engagement in a peer group with pro-social attitudes and behaviors; increased skills planning, problem-solving, or perseverance that helps participants with schoolwork (Heath & Roach, 1999).

Arts education is the subject of a current controversy as to whether such programs should

justify their existence by proving that skills and attitudes gained from involvement in the arts transfers to improvements in basic skills or test scores, or simply celebrate “art for arts sake” (Hagood, 2001; Reimer, 2001). However, we have evidence that such programs not only engage youth in a way often lost in schools and other mainstream institutions, but also succeed in building both “soft” and “hard” skills needed for long-term success.

### **Summary**

Afterschool programs provide an avenue for engaging young people in active learning experiences. Active learning encompasses a wide variety of program strategies, including program foci like arts and sports, approaches like project-based learning and experiential education, or structures like mentoring and apprenticeships. These strategies have a common emphasis on developing young peoples’ personal commitment to learning through their own experience, reflection and skill building.

As with the afterschool program evaluations summarized in the previous section, we find that in order for any program strategy to be effective, it must be conducted in a quality manner. Service learning must include both the community experience and links to academic skills in an intentional manner; mentors must be carefully screened, matched and trained; arts education must include opportunities for facilitated group reflection. Intensity matters, too. Moore and Allen suggest that youth who are involved for at least two days per week for a minimum of 12 weeks gain the most from service learning experiences (1996).

Although all youth can benefit from experiential learning activities, those who need the most receive the greatest benefits. These program strategies can empower young people as agents of their own learning in a way that traditional school pedagogies rarely succeed in doing. Keys to successful programming include supervision and training of mentors or staff, structure for the activities or program and a voice for young people. As Jekielek comments in reference to mentoring programs: “Programs that are driven more by the needs and interests of youth—rather than the expectations of the adult volunteers—are more likely to succeed.” (2002, p. 6)

## VIII. Implementing Effective Programs

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Why do some programs seem to be beneficial, while others may have no perceivable effect? Which program features—staff, facility, curriculum, structure, mission, administration, and location—work best for middle school students? How do the characteristics of participating students affect program outcomes? This section explores the “how”: the processes, structures and approaches that programs can employ to increase their likelihood of reaching our goals for youth.

Our research base in this area is limited; we don’t have many studies that compare students participating in academically focused programs with those involved in enrichment programs, or students in school-based programs with those in community-based programs, or studies that compare the effects of general programs with specific focus or activity-based programs. To date, qualitative studies that employ observational methods have provided the most fruitful information on the characteristics of effective programs. These studies (e.g., Appalachia Educational Laboratory, 1990; Scott, Witt & Foss, 1996) point to factors that echo the characteristics described throughout this report: caring staff, activities that provide structure and challenge, choices, leadership opportunities for youth, and pro-social cooperative group activities.

The few quantitative studies that compare programs are also instructive. An evaluation of the New York City Beacons compared programs that had successfully implemented high quality youth development programming with those that had been less successful (Warren et al., 2002). In effective programs, youth were more likely to report feeling better about themselves at the Beacon, and that staff had high expectations for their behavior and performance. They were less likely to report that they cut classes, stole money or belongings, or got into fights. Comments from students included “I know nothing will happen because all the counselors are kind of like my parents” and “They make us learn to talk out our problems and learn to get along” (2002, pp. 7-8 summary report).

Su (2001) analyzed the effects of participation in different types of afterschool programs in Taiwan on grades and children's emotional adjustment. Four program types were included in the study: academic enrichment, non-academic enrichment, academic tutorial, and mixed (child care) programs. While these prototypes do not mirror the program models in the U.S., the findings suggest that assumptions regarding program effects may be misplaced.

In Su's study, students who participated in academic tutorial programs and mixed programs with an academic focus had higher levels of anxiety and depression. Interestingly, in addition to negative emotional effects, academic programs did not produce any positive effects on children's academic achievement. On the other hand, enrichment activities were associated with positive academic outcomes. Su concludes, "Extended involvement in academic activities, specifically school curriculum-related, not only did not produce positive effects on children's academic achievement as many parents hoped, but also created much anxiety and more internalizing problems in children" (Su, 2001 , pg. 137).

Time and again, in the research cited in this report, we find that it is not so much the type of program—the focus, strategies or location—as the environment that is created for youth that makes all the difference. Unfortunately, we don't yet have a lot of comparative research on the differential effects of quality indicators like the type of staff, administrative leadership skills, pedagogical approach, or curricula of afterschool programs. It's important to remember, however, that there will never be simple answers to these questions. In the end, program effects come down to individuals and attributes that are not easily measured. What makes the greatest difference—individual staff and their relationships with individual students—is rarely included in evaluation or developmental research.

There is wide consensus in the field, however, regarding the features of high quality programs. A number of organizations, including the National School-Age Care Alliance, the U.S. Department of Education, the Forum for Youth Investment, and the Center for Youth Development and Policy Research, have developed lists of the elements needed to create effective programs. Each organization's results reflect its own particular interests and

perspectives, but there is also a great deal of consistency (Beckett, Hawken & Jacknowitz, 2001; National Institute on Out-of-School Time & Forum for Youth Investment, 2002; National School-Age Care Alliance, 1998). Recently, the National Research Council's Committee on Community-Level Programs for Youth published the results of its work (Beckett et al., 2001), including a list of eight features of positive developmental settings:

1. Physical and Psychological Safety
2. Appropriate Structure
3. Supportive Relationships: 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: opportunities for autonomy, taking responsibility, and challenge
7. Opportunities for Skill Building
8. Integration of Family, School and Community Efforts

In an attempt to define the most important characteristics of effective programs, researchers from the RAND Corporation recently employed meta-analysis, an advanced statistical technique (Beckett et al., 2001). Meta-analysis “adds together” the findings from a wide variety of studies to come up with findings about the effects of program characteristics. This study found strong support for positive outcomes linked to three program characteristics: variety of activities, flexibility of programming and emotional climate. However, the lack of studies in the field limits the utility of these findings. Other characteristics may be just as important, but because they have not yet received as much attention from researchers, they did not show strength in the meta-analysis.

Only two studies, both conducted by Vandell and her colleagues, were assessed by Beckett and her colleagues as meeting high standards of scientific validity (Beckett et al., 2001). Vandell and her colleagues examined the relationship between the emotional climate in the afterschool

program and children's academic and social adjustment (Pierce et al., 1999; Rosenthal & Vandell, 1996). Especially for boys, school adjustment seems to be influenced by the quality of the afterschool environment—negativity on the part of afterschool staff in their interactions with children is associated with poorer grades in reading and math for boys. Poorer grades are also linked to frequent negative interactions with peers in the afterschool program. Positive interactions with staff and flexibility in program structure are related to better social skills and behavior, especially for boys.

Effective afterschool practices are likely to be similar to effective in-school practices, especially for programs that focus on building academic performance. Two strategies highlighted in the education literature are particularly relevant to afterschool programs: cooperative learning and small group/class sizes. Cooperative learning has been widely documented as an effective strategy for supporting academic achievement among all levels of students (for example, see Hawkins & Weis, 1985; Thomas, 2000). Cooperative learning is associated with improvement not only in academic achievement, but also social skills (Slavin, 1995; Thomas, 2000). Most afterschool programs work with relatively small groups of children. Education researchers have documented the effectiveness of this strategy in supporting academic success. Smaller class size promotes student engagement, better peer relations among students, more time for each student to engage in discussions, and more opportunities for teachers/staff to provide students with individual attention (U.S. Department of Education, 1999).

What does it take to provide high quality programming? The following list reflects a growing consensus on the ingredients of successful programs (see Connell & Gambone, 1999; Halpern, 1999; Hawkins & Weis, 1985; Heath & McLaughlin, 1996; McLaughlin et al., 1994; Pechman & Fiester, 2002; Pierce et al., 1999; Rosenthal & Vandell, 1996):

- Sufficient well trained and compensated staff who receive health and other benefits
- Staff who work in the program over a long period of time and are able to build relationships with the participants
- Staff who understand the developmental tasks faced by young people and are able to help them accomplish these tasks

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

- Low adult-to-youth ratios
- Staff who engage in frequent, positive interactions with participants
- Staff who understand the cultural, racial, ethnic, and class backgrounds of participants and are able to support healthy identity development in a diverse group of young people
- Staff with high expectations of all youth
- High quality content
- Clear rules and expectations with consistent consequences
- Authentic curricula that is age-appropriate and provides engaging, skill-building, hands-on activities geared toward the particular goals of the program
- Flexibility that allows participants to choose activities that interest them or choose the approach they use to achieve goals
- Youth valued as resources, including having a voice in determining program content and connecting to larger community
- A role for participants in creating, implementing and reflecting on the program
- Strong, sustainable administration
- A full-time coordinator
- Clarity of mission and goals
- On-going self-assessment and evaluation
- Adequate funding without constant threat of loss
- Managers who are skilled administrators, savvy advocates, inspiring leaders, and connected to community resources
- Support of the school principal (especially if school-based)
- Involvement of parents
- Access to appropriate space for program and storage
- Connections to community partners and infrastructure for programming, training, technical assistance

Every program will look different, of course, even if it incorporates many of these elements. For example, Heath and McLaughlin refer to “a learning, performing group in which it is safe

to take risks, to stretch, and to learn new roles and ways of using oral and written language” (1996 p. 70). Some components, like homework help, are common to most afterschool programs, while others, like literacy development and linkages to the regular school program, are more common among programs that specifically focus on improving students’ academic performance. The next section of this report will explore “promising practices” in these three areas.

### **Homework**

Most people, including parents, teachers and the general public, assume that when children are doing homework they are building their academic skills. Research on the effects of homework tells a somewhat different story, however. In spite of the current emphasis on homework as a pathway to academic success, there is no research supporting the contention that it helps elementary school students do better in school (Cooper, 2001; Cooper, Lindsay, Nye, & Greathouse, 1998; Kralovec & Buell, 2000). On the other hand, there is evidence that high school students benefit from the hours they spend on homework. Middle school students fall somewhere in between—some studies show no effects while others find a small positive effect (Cooper et al., 1998; Smith, 1990). Kralovec and Buell (2000) argue that homework actually *increases* educational inequity. Students who do not have access to computers, help from parents, a quiet place to study, have many household and care-giving responsibilities, or have to work after school are at a distinct disadvantage.

Regardless of what research may say, increasing homework loads are a fact of life for students, parents and afterschool programs across the country. In 1981, 6 to 8-year-olds spent an average of 44 minutes a week, or 9 minutes a night on homework. By 1997, that number had nearly tripled to 125 minutes a week, or 25 minutes a night (Winerip, 1999).<sup>6</sup> Nearly all programs now offer some level of homework help, although the approach and type of support provided varies widely (O’Connor & Maguire, 1998). Homework may not help children do better on standardized tests, but it probably does affect their grades, since most teachers

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<sup>6</sup> The amount of time spent by high school students on homework has remained stable over this period—between six and seven hours per week.

require it to be completed. There is evidence that participating in afterschool homework programs results in increases in homework completion and quality (Carlisi, 1996; Johnson & Dooley, 1999; Johnson et al., 1999), although this is not true in all cases (U.S. Department of Education, 2003).

Afterschool programs may play an important role in “leveling the homework playing field” for students from different socioeconomic backgrounds. Such programs often provide the supplies, space and support that students might not get elsewhere (Glazer & Williams, 2001). How should homework help be provided? O’Connor (1998) suggests that homework not be done immediately after school when students are weary of sitting quietly at desks for a long time. Rather, homework should be interwoven with other activities.

In addition, it is often helpful if afterschool programs employ teachers from the children’s school or another district to help with homework time, since they are most likely to know the curriculum and the strategies employed by teachers (Johnson & Dooley, 1999). In order to accommodate teacher’s schedules, homework time is then slated to occur right after school. Many young people may benefit from time to relax, have a snack, or participate in activities not related to academics immediately after school. Other strategies include homework notebooks to communicate with school-day staff, providing participants with instruction in study skills, creating homework contracts that are signed by parents and children, providing needed materials, establishing an appropriate homework space and consistent routines, and recruiting appropriate supports, including tutoring, for children with learning disabilities (ERIC Clearinghouse on Disabilities and Gifted Education, 2001; O’Connor & McGuire, 2001).

### ***Links to the School Day***

Interestingly, despite widespread emphasis on linking afterschool programs with schools, we don’t have much evidence that such collaborations result in more positive outcomes for youth. Promoters of school/afterschool collaborations assume that support for participants’ academic success will be more effective if program staff understand the expectations and

concerns of schoolteachers. It seems logical that an understanding of how the teacher expects a student to attack math problems will facilitate helping a child complete his or her math homework. When afterschool staff members are familiar with curricular expectations and content at different grade levels, they can develop themes, projects, trips, and activities that build on these topics.

Some observers note, however, that there may be dangers inherent in aligning the school day too closely with the less formal world of afterschool programs. Halpern (1999) argues that one of the most important aspects of afterschool programs is that they are *not* school, and provide a different kind of space more in tune with the student's own cultural and personal identity. Promoters of the arts advocate for afterschool hours as the time for young people to experience environments and activities that aren't available at school, regardless of whether such experiences lead to increases in academic achievement (Eisner, 2001; Gee, 2001; Reimer, 2001; Wolf, 1999).

On the other hand, Noam and his colleagues (1999) suggest that although they should be different, schools and afterschool programs can learn from and strengthen each other. In the context of a reciprocal exchange of information with each program respecting the goals and methods of the other, school staff can learn important information from an afterschool staff that develops strong relationships with students. In addition, afterschool programs can gear activities and processes to meet the needs in-school teachers identify as important for participants.

Collaboration between in-school and afterschool programs is something that nearly everyone likes, but no one knows how to achieve. Most program staff strive for good communication with schools, but often discover it is one of the most challenging tasks they face (Grossman et al., 2002; U.S. Department of Education, 2003). Several areas of difficulty emerge repeatedly in the literature:

1. School staff and afterschool staff do not have overlapping schedules, making communication difficult.

2. Afterschool staff frequently lack paid time for meetings or planning outside of the hours when children are attending the program.
3. School staff may not understand or value the informal learning style common to afterschool programs, or may not feel that uncertified staff can provide effective support for school success.
4. Due to low wages and benefits and the part-time nature of the job, turnover rates for afterschool staff are high, making relationships difficult to create and maintain.
5. Afterschool programs typically serve children from a range of grades, making it difficult to incorporate in-school curricula in a meaningful way.

Afterschool programs have developed a number of creative strategies to overcome these challenges (Honig, Kahne & McLaughlin, 1999; National Collaboration for Youth, Coalition for Community Schools & Institute for Educational Leadership, 2002; Policy Studies Associates, 2001). Many programs find that hiring schoolteachers and paraprofessionals for certain roles, even if the program depends primarily on non-school staff, goes a long way toward building the needed connections between the in-school and afterschool program. This kind of staff overlap creates a personal link between the two programs (Noam, Biancarosa & Dechausay, 2002; Trousdale, 2000). There have also been cases where an afterschool program has been able to provide staff or other resources to the teaching staff, creating a climate of good will (Trousdale, 2000). An innovative initiative in New York is building connections by becoming a training ground for teacher education programs. Communication, understanding and collaboration increases accordingly as more afterschool program staff are becoming teachers in public schools (Fiester et al., 2001).

### ***Literacy Development***

Being able to read and write is the key to success in nearly every subject (for a review, see National Institute of Child Health and Human Development, 1998). Consequently, many successful afterschool programs strive to help young people develop good literacy skills.

Reading during out-of-school time, especially reading for pleasure, is closely linked to school

success (Nimon, 1992; Peterson & Zill, 1980; Smith, 1990). Studies of home environments and activities have also demonstrated causal links between academic achievement and time spent reading, the number of books in the home, and use of explanatory language in interactions between parents and children (Anderson & Stokes, 1984; Heath, 1982; Snow, 1993). Nimon's (1992) study of nearly two hundred randomly selected children between the ages of five and seven found that the number of hours children spent reading outside of school was correlated with their test scores on reading comprehension.

The power of reading goes beyond simply academic results of improved literacy, however. Good literacy skills can lead to higher educational attainment, annual earnings, lower unemployment, and lower delinquency and crime. In addition to improvement in reading-related skills like vocabulary, reading comprehension and word recognition, tenth graders who spent significant time reading in Peterson and Zill's study (Peterson & Zill, 1980) had fewer behavior problems and better overall school performance. Students often feel ashamed of their poor reading skills. In the informal, non-competitive and individualized context of an afterschool program, they may be able to tackle the hard work of building literacy skills without fear of ostracism or ridicule from classmates (Hynes, O'Connor & Chung, 1999).

As afterschool programs intensify their focus on academic performance, they are exploring ways to support children's literacy skills and increase in-program reading time (Hynes et al., 1999; Spielberger & Halpern, 2002). Many program providers may feel more comfortable supporting literacy than providing academic content in other areas. Programs for younger children may incorporate reading time into the schedule and reading corners into the setting. Programs serving middle school students engage students in reflection and interactive discussions (Heath, 1994), bring in trained tutors (see above), and develop family literacy activities (Castillo & Winchester, 2001).

A recent report by the Chapin Hall Center for Children (Spielberger & Halpern, 2002) describes the multiple strategies pursued by afterschool programs that aim to build their participants' literacy skills. Programs offer relatively simple approaches, like homework/study

time, board games (Scrabble, Boggle) and independent reading time, as well as more sophisticated activities, including book discussions and creative use of technology and the arts. Too often, however, a lack of skilled staff who have expertise in helping children with serious reading deficits, a lack of materials and resources, and a lack of administrative support create challenges for many programs (Hynes et al., 1999; Spielberger & Halpern, 2002; U.S. Department of Education, 2003).

### ***Challenges to the Field***

There is often a gap between the vision of an excellent program and implementation realities. Administrators and staff of middle school afterschool programs find that difficult barriers stand in the way of achieving the level of quality articulated in reports like the one recently published by the National Research Council (Spielberger & Halpern, 2002). Most programs for early adolescents face difficulties in obtaining adequate ongoing funding, providing transportation, recruiting and retaining qualified staff, accessing appropriate space, and engaging a consistent group of participating students (Grossman et al., 2002; Halpern, 1992; Pechman & Fiester, 2002; U.S. Department of Education, 2003).

Most of the limited funding available to programs serving middle school children is granted on a short-term basis, resulting in continual sustainability challenges for program administrators. The Child Care Development Fund and TANF, funding sources that support much of the afterschool programming accessible to low-income children, are not available for services to children over the age of 13. In recent years, the federal Department of Education has funded 21st Century Community Learning Centers, which serve middle school students. However, these grants are only available for a three-year period.<sup>7</sup> Several states provide short-term grants specifically targeted for afterschool programs. Private funding sources, including charitable organizations like the United Way, as well as private and corporate foundations, support many afterschool programs on a short-term basis. Programs financed under these conditions must invest ongoing resources to maintain their existence—time and money that

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<sup>7</sup> The 21<sup>st</sup> CCLC funding has now been transferred to the states, which can choose to provide either 3-year or 5-year grant cycles.

could otherwise be directed toward salaries, activities or evaluation.

The staffing “crisis” in afterschool programs is a well-known fact of life in the field. Programs offered “after” school will never be able to support a full-time workforce (Halpern, 2000). In addition, as with other related fields in child care or the human services, most afterschool program positions offer low compensation and few, if any, benefits. Major initiatives in cities around the country are working to develop innovative career tracks and full-time jobs for a subgroup of leadership positions (National Institute on Out-of-School Time, 2001b; Noam, Miller & Barry, 2002), but the vast majority of programs must struggle to fill positions and retain staff for even a single school year.

Schoolteachers are becoming a substantial portion of the afterschool workforce as, increasingly, programs embrace an academic focus. In some programs, teachers play a significant role in supporting academic remediation or homework completion. In other programs, they may lead activities or classes related to their outside interests, allowing them to share and build relationships with students in an informal setting.

Despite these assets, schoolteachers cannot be the foundation of the afterschool workforce. School may end at 3:00 p.m., but a teacher’s workday requires time for activities like lesson planning, reviewing homework, meeting with colleagues, and attending professional development training (Brown, 1999; U.S. Department of Education, 2003). If schools are to help children achieve high standards, teachers will need to work long hours creating effective classrooms. In addition, an orientation toward formal educational practices is not likely to be successful in an afterschool setting. Some teachers may make the transition to the afterschool environment more easily than others, however.

Maintaining student participation is a major challenge for many programs serving middle school students (Dubas & Snider, 1993). A staff member quoted in Heath and Roach (1999) acknowledges, “If kids walk away from this place and stop wanting to come here and work, nothing we adults can do by ourselves will keep these doors open.” In the Extended Service

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

Schools, one barrier for school-based programs was students' dislike of school (Grossman et al., 2002; Grossman et al., 2001). Trying to achieve goals of increased social and academic competence while offering engaging, fun activities that will attract and keep students is a constant balancing act for practitioners.

We also know that levels of participation must be high enough for young people to feel competent in an area, develop lasting relationships with adults, and a sense of belonging in the program. These requirements pose challenges for programs that embrace an activity model of short "courses" offered for a few hours per week over a period of six to ten weeks. On the other hand, this model is a good fit with young adolescents' need to develop their ability to make choices and independent interests. Most importantly, activity-based programs may have an easier time recruiting and retaining participants, who are often reluctant to commit to something that requires attendance every afternoon.

What do youth want? Younger children can be required to attend an afterschool program for supervision, but middle school students will "vote with their feet." Programs must be compelling enough to compete with the lure of "hanging out" with friends and other opportunities available in the community. In focus groups in the Boston area, children and teens talked about what they want in a program, and what they do and don't like about existing programs (Innovation by Design & Center for Teen Empowerment, 2002). They definitely don't want something that looks and feels like more school. Youth are attracted to afterschool programs that are facilitated by caring adults and offer hands-on, fun activities in a physically and emotionally safe environment where they can learn new skills. Other after school activities, like sports, reduce program participation as do paid jobs (for older teens) and household responsibilities, especially caring for younger siblings (more so for girls).

Transportation is another common barrier. In fact, it is often an insurmountable problem for programs that are not school-based, which means only students who are within walking distance can attend. Even for school-based programs, the lack of a late bus or insufficient seating limits enrollment, leaving many young people out. Parents who have to work late or

work rotating shifts aren't able to pick children up (Grossman et al., 2002), and others are not comfortable having their children walk home on dark winter afternoons. Some programs have a van or hire their own bus, but such amenities take a large chunk out of the budget, limiting resources for staffing and activities.

While all programs have staffing and financing challenges, inner city programs serving low-income communities face additional hurdles. They typically must contend with concerns related to safety and crime. Programs in higher crime communities have to invest human and financial resources in the development and maintenance of security systems. Children who have been affected by crime and violence may find a safe physical and emotional space at the program, but they may also suffer emotional problems, e.g., anger and fear, which can act as impediments to easy program operation. Finally, college students and others sometimes shun what they perceive as dangerous neighborhoods, adding to the difficulty of recruiting qualified staff.

Maintaining consistent student participation is another difficulty for programs serving low-income students. Families move frequently; students often have family responsibilities like caring for younger siblings; and students' feelings of alienation from and dislike of school may affect program attendance (Fiester et al., 2001; Grossman et al., 2002; Manswell, LaPoint, Thomas, & Thompson, 2001). Parents' and children's apprehension about walking home in the dark during the winter months can outweigh the potential gains of participation, resulting in lower attendance. At the same time, afterschool programs represent a unique opportunity for inner-city youth to develop a sense of empowerment by working for positive social change in their neighborhoods and the larger community (Scharf & Woodlief, 2000).

### **Summary**

Quality programs for middle school students will most likely be different from successful programs for either elementary school or high school students. Effective program for early adolescents provide them with the "3 V's"—voice, vote and voluntary activities. They need opportunities to develop planning, conflict resolution, communication, and decision-making

skills. Successful programs for middle school students must tie in to their interests to get them in the door; and once in, keep them engaged while building the skills they need to succeed as students and citizens.

### IX. Critical Hours

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Early adolescence is a fragile period—one of fast-paced growth coupled with increasing opportunities for getting into trouble. The current programs, structures and institutions that exist in American society are not sufficient to help many young people reach their potential (Dryfoos, 1990). Parents are busy making ends meet; schools are structured in ways that are unsuited to the needs of middle school students; and the streets are often dangerous (Chin & Newman, 2002; Eccles & Midgley, 1989; Newman et al., 2000). Although there aren't any easy answers to these problems, this report suggests that afterschool programs have an important role to play; they can help students tackle academic tasks and promote healthy development in critical areas.

The afterschool program field is fractured into subgroups with different goals, models and systems (Miller, 2001). While diversity will always be necessary to meet the varied needs and interests of young people, their families and communities, a growing body of research can help us direct resources to creating the most effective programs for the greatest number. This paper builds on the theoretical frameworks suggested by other contributors to the field and conceptualizes a theory of change to describe the program features resulting in positive outcomes, including long-term educational success, for early adolescents.

Until recently, many programs claimed to have positive effects on participants without demonstrating these outcomes, or even clearly defining them. Now we have evidence that such claims may have been true: programs that employ effective practices and provide a high quality environment can enhance children's learning and overall well being. However, afterschool programs, especially those serving middle school students, face stiff competition

from another extremely appealing pursuit: hanging out with friends. They must find ways to compete with the streets and the mall. To bring students through the door and keep them coming, programs must work hard to ensure they meet early adolescents' developmental needs for belonging, identity, leadership, responsibility, and autonomy.

Programs must also 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 today operate in the context of increasing pressure to help students achieve test-based academic outcomes. Programs must fit the interests, values and norms of students, who may come from diverse cultures. To fulfill their mission of producing positive outcomes, programs must also find ways to expose participants to a world beyond their immediate experience; give them a sense of being able to make a difference in their lives and the larger community; and raise their expectations of what they can accomplish. When programs are successful, students have increased motivation to succeed in school as well as the skills they need to reach their goals.

Increasing the academic achievement of early adolescents will require the efforts of parents, schools and the community to overcome the barriers faced by many youth. Fortunately, there is firm evidence that afterschool programs can play an important role in this endeavor. The next step is to build strong theories describing how experiences in afterschool programs lead to increased achievement, and then do the research to test the theories. We need to increase the number of programs available to middle school students, and take the steps necessary to ensure that these programs have the resources, including knowledgeable and skilled staff, to effectively build the developmental assets of young people.

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. 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.

### Appendix A - A Brief Summary of Resiliency Research

Resiliency research, which identifies the factors that “protect” young people from poor developmental outcomes, is key to understanding the potential effects of adolescents’ experiences in afterschool programs. This body of research draws on studies focused on a number of different issues and methodologies (Garmezy, 1985, 1991; Noam, Pucci & Foster, 1999; Rutter, 1987; Werner, 1989; Werner & Smith, 1982). These “protective” factors promote successful adaptation to stress. Stress is defined differently among varied studies in the literature, but generally results from the effects of multiple risk factors, including poverty. Protective factors exist not only within the individual, but also in his or her family and community. Garmezy (1991) identifies three categories of protective factors:

1. Individual factors (feelings of self-efficacy, perceived academic competence, problem-solving skills)
  2. Family context (involved parents)
  3. External factors (caring adults, connections to community institutions)
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1. Individual factors include those that are fairly immutable—easy versus difficult temperament, chronic health problems versus good health—as well as those that have developed over the course of a young person’s life, including feelings of self-efficacy, which is defined as the ability to have an impact on one’s environment to achieve desired results. Other individual characteristics include perceived academic competence, which is key to academic success, and specific cognitive skills like problem-solving and social skills, including the ability to reach out to others.
  2. The family context includes both family structure and characteristics. Many of the early

studies focused on family-related risk factors, including imprisonment of a parent, a parent's severe psychiatric disease, parental abandonment, and domestic violence (Garmezy, 1991; Masten et al., 1990; Rutter, 1987; Werner & Smith, 1982). Family factors related to the out-of-school time environment include family structure, interactions between family members, parental involvement in a child's school experience, and the emotional climate in the home (Clark, 1987; Comer, 1984; Vandell et al., 1996).

3. External systems include community-based organizations, churches and schools, and provide access to a larger range of experiences, as well as opportunities to build meaningful, caring relationships with adults. Both qualitative and quantitative data point to the importance of a relationship with an adult who took special interest in a child or adolescent, often a teacher who spent time after school helping a student. In Werner's (1982) 30-year study, most of the resilient children had important institutional connections that created the environment for relationships with caring adults. These extra-familial connections provided a stable system where children and young adults could go physically, as well as psychologically, to build an identity for themselves beyond their family circumstances. While teachers and schools sometimes played this role, churches and organizations like the YMCA and 4-H clubs were also major sources.

## Appendix B - Challenges to Evaluation of Afterschool Programs

Rising expectations of the outcomes of participation in afterschool programs and the concomitant expectations of program providers to document these outcomes is challenging the field. The standards of rigorous scientific research require resources that are not available to most providers. Even with relatively straightforward types of evaluation, including implementation evaluation, benefits must be weighed against the potential uses of resources for other activities, including serving youth with quality programs.

The field faces significant challenges to answering research questions regarding program

effectiveness. Resources available for evaluation research of an under resourced field are limited. Implementation evaluations are relatively inexpensive and can be conducted by trained staff, but evaluations designed to measure program effectiveness—is the program achieving the specified changes for youth? — require the use of experimental or quasi-experimental methods (see Table 6). Otherwise, such research may be misleading as there is no way to attribute identified changes to program participation. Is academic improvement due to changes in the school curriculum? Is a lack of improvement in grades actually an indication of program success because without the program average grades would have decreased?

Without substantial information on program processes, outcome evaluations are not particularly helpful and may even be misleading. Evaluators may choose outcomes that are not appropriate for a particular program unless there is an understanding of the goals and practices of the program. A study showing no program effects may be measuring the wrong outcomes. Even where positive outcomes are found, it is very difficult to interpret the findings without a full understanding of the program: Who was being served? How many hours did they participate over what period of time? Who were the staff members? How were they prepared for the work and supervised at the program? How did staff interact with participants? What was the emotional climate in the program? What specific skills and attitudes were the foci of programming? What activities occurred?

An increasing number of evaluators have addressed the challenges of afterschool evaluations by utilizing “theory-based evaluation.” Theory-based evaluation depends on a strong theory of change based on scientific evidence detailing the relationship between program practices and expected results. Although outcomes from a theory-based evaluation can’t be scientifically attributed to program participation, a strong case can be made that such changes are likely to be the result of participation as specified in the theory. Information is also obtained on both implementation and outcomes, providing the potential for examining the links between what happens in the program and how children and youth are affected.

Table 6 - Types of Program Evaluation

Type of Evaluation	Questions	Methods
Implementation or Process Evaluations	<ul style="list-style-type: none"> <li>■ Was the program implemented in the way it was intended? If not, why not?</li> <li>■ What was the process for implementing the program?</li> <li>■ How do various stakeholders perceive the program?</li> <li>■ Does the program have characteristics of effective programs as described in standards or other materials?</li> <li>■ Do program stakeholders feel the program is going well? If not, why not? What should be changed?</li> <li>■ Are the program components linked as specified in the theory of change?</li> </ul>	Ethnographic (close observation); interviews; focus groups; satisfaction surveys of stakeholders (staff, parents, youth); observation assessments of program
Outcome or Impact Evaluations	<ul style="list-style-type: none"> <li>■ Is this program effective in reaching its stated goals for youth (and families and communities, if appropriate)?</li> <li>■ Is it particularly or differentially effective for various subgroups (e.g., ethnicity, age, gender, etc.)</li> </ul>	Randomly assigned experimental methods; quasi-experimental with comparison group; outcome surveys of stakeholders using reliable valid instruments; outcome observations using reliable valid instruments
Combined Evaluations	<ul style="list-style-type: none"> <li>■ If the program was effective in reaching its desired outcomes for youth, what aspects of the program contributed to this success? What aspects of the program did not contribute to this success?</li> <li>■ If the program was not effective in reaching its desired goals, why not? How might the program have been implemented differently?</li> </ul>	Combination of the above

Theory-based evaluations generally are participatory—program stakeholders develop the theory of change, usually with the assistance of outside experts, and are involved in understanding the information, adjusting the theory of change, and considering revisions to the program to better meet stated goals. Unfortunately, the lack of theory development in the afterschool field results in theories that may not be built on a solid foundation. As more research is conducted, this problem will be resolved. Theory-based evaluations do not have the scientific rigor to be accepted in the academic research community. They require significantly fewer resources than experimental and quasi-experimental models, however, and are being explored in a number of different ongoing studies.

Evaluating the effects of afterschool programs is much more complicated than it first appears. Researchers are faced with a number of thorny issues, e.g., given the political, ethical and technical issues involved, how does one select a control or comparison group? Since all youth are doing something after school, it is difficult to differentiate the effects of a particular program or activity from the effects of program or activities in which “control” or “comparison” group members are involved. When it comes to out-of-school time, there is no such thing as a “no treatment” group. In middle class communities, programs are unlikely to demonstrate powerful effects, since non-participating children typically receive the same types of opportunities and supports in other ways when not in school.

Because children (and their families) self-select into programs, selection bias must be taken into account. Differences in children may simply be due to pre-existing differences, e.g., if higher-performing children are more likely to attend the program. If program choice varies by socio-economic status, family structure or ethnicity, differences among children may be due to these characteristics rather than the program being studied.<sup>viii</sup>

To date, most evaluations have focused on a single program or organization, measuring outcomes without comparison to a group of non-program children. While this obviously limits the reliability of the findings, many evaluations conducted over a considerable period of time have demonstrated meaningful results in terms of improving children’s skills, attitudes, behavior, and performance.

### ***What Should Programs Be Held Accountable For?***

Some youth development leaders suggest that programs should be held accountable for those things they can substantially affect and control. Youth development researchers James Connell and Michelle Gambone (1999; 1997) posit that required outcomes should meet the criteria of the three M’s: 1) Does it matter? 2) Is it measurable? 3) Is it moveable? They conclude that programs can and should be held accountable for the following “key supports and opportunities”:

1. Safety, both physical and emotional
2. Relationships with caring adults and youth
3. Participation of youth in programming
4. Skill-building in specific areas as specified by the program
5. Community involvement

Evaluations by Connell (1995), Walker & Arbreton (2002), and Kahne (1999) utilize this approach. They evaluate programs based on whether they meet a set of effective practices or what might be called outputs. For example, the San Francisco Beacons evaluation discussed earlier identified the following program strengths: supporting academic achievement; providing a safe place for youth; encouraging better use of free time; promoting leadership and career development; and bringing new resources to public school.

Others believe that such outcomes are important, but they are not powerful enough to convince external audiences (policymakers, the public, funders) to provide the necessary levels of support for programs, or that evidence of changes in youth as a result of exposure to the program is needed. Given the general interest in promoting student success in an era of standards-based high stakes testing, it is not surprising that many of those external audiences are most interested in academic outcomes, especially improvements in test scores results. Such outcomes have great appeal because they are available, quantifiable, generally accepted and understood, and deemed important.

There is controversy over whether test scores should be a primary accountability indicator used for afterschool programs. A number of intervening processes are assumed to eventually lead to increased school engagement. This is called “proximity,” or the closeness of the link of outcome to the youth’s afterschool experience.

Finally, the search for “common outcomes” is elusive. Because program diversity is nearly infinite, the range of outcomes is likely to be exceedingly broad. Attempts to find common outcomes among diverse programs have been more difficult than expected (Chretien, 2002).

# CRITICAL HOURS

## AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

On the other hand, when programs have specific goals in common—helping with homework, for example—it is reasonable to apply the same measures to determine outcomes. When a funding source is developing a new grant program or revising an existing one, a well-planned theory of change can describe particular outcomes that all grantees are expected to achieve. This approach leaves flexibility for grantees—schools or community-based organizations—to determine how they will achieve the desired results. Recent thinking about effective programs recommends an approach that defines results, but allows individual sites or grantees to determine the process and structure for delivering services (Schorr, 1997).

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# CRITICAL HOURS

AFTERSCHOOL PROGRAMS AND EDUCATIONAL SUCCESS

## About the Author

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Established in 1998, the Nellie Mae Education Foundation provides grants and other support to education programs in New England that help improve academic achievement and access to higher education for low-income and underserved students. It also funds research that examines critical educational opportunity issues affecting underserved students, families and adults, and convenes educators, policymakers and community members to discuss and influence pivotal education issues.





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