Physical Activity in After School Programs: 
Building Better Programs for Healthier Students 

by 
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A Master’s paper submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Public Health in the School of Public Health, Public Health Leadership Program. 

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"Education...is a process of living and not a preparation for future living."
--John Dewey

Abstract

After school programs are explored as a venue for providing physical activity for children. The research reviewed points to multiple benefits of regular physical activity for children, including weight management, academic and social support, with a primary focus on prevention and decrease in rates of overweight in children. Policy development tools to support such programs and program planning strategies are discussed. In addition, current models of physical activity in after school programs are reviewed. Increasing levels of physical activity in children via after school programs designed to meet the needs, interests and abilities of all students with the ultimate goal of developing life long interests and improved health is supported.

It is being said that today’s children may be the first generation to live shorter lives than their parents. Considering the incredible strides that public health has made and the medical advances and technologies now available, such a statement is hard to believe. The facts, however, show that many of our children are part of an obesity epidemic. Overweight and obesity are based on the Body Mass Index (BMI) measurement. Among children, overweight is diagnosed using gender specific growth curves—above the 95th percentile, a child is considered overweight and between the 85th and 95th percentiles, they are considered at risk for overweight. Obesity has no
established definition for youths (Kim, 2008). Sixteen percent of children—9 million—are considered overweight, a figure that has tripled since 1980, and the trend shows no signs of reversing (Satcher, 2005). Rates of overweight among preschoolers and adolescents has more than doubled over the past three decades; for children ages 6 to 11, rates have tripled (Institutes of Medicine [IOM], 2004a). The risks to children’s health are both immediate and long term with increased susceptibility to a multitude of diseases including diabetes, heart disease, high blood pressure and elevated cholesterol, arthritis and joint problems among many others. The Institutes of Medicine report, *Preventing Childhood Obesity: Health in the Balance*, states that, “childhood obesity is a serious nationwide health problem requiring urgent attention and a population-based prevention approach” (IOM, 2004b, p.16).

The former U.S. Surgeon General, Dr. David Satcher, was instrumental in bringing much needed attention to the childhood obesity epidemic and possible solutions. He asserts that, “the school setting is a great equalizer, providing all students and families—regardless of ethnicity, socioeconomic status, or level of education—with the same access to good nutrition and physical activity”. (Satcher, 2005, p.27) Dr. Satcher goes on to say that schools can take action in several ways to promote student health: create a school health advisory council, develop a comprehensive wellness policy including goals for increasing students’ physical activity, integrate physical activity and nutrition into the regular school day, encourage staff to model healthy lifestyles and incorporate nutrition education, healthy snacks, and physical activity that engages students in fun and innovative ways, into after school programs. The work of Dr. Satcher and numerous other organizations, point to the important role that after school
programs can play in increasing children’s level of physical activity to achieve and maintain healthy weights.

After school programs have long provided important services to children, families and schools. They provide a safe and often inexpensive place for children to spend after school hours when their parents or caregivers are unavailable, fulfilling a growing need in our society. Research has shown that children enrolled in after school programs fare better on many measures including academic and social assessments than their peers not enrolled in these programs (Miller, 2003; Perkins-Clough, 2003). After school program models typically involve providing childcare and positive youth development, extended day academic support and other extracurricular activities providing a wide range of opportunities (Miller, 2003). However, as mentioned above, a new model for after school care is emerging. Growing concerns regarding childhood obesity as well as evidence pointing to the developmental and academic benefits of physical activity, have resulted in an increasing number of after school programs including physical activity components or being entirely fitness based. This trend is supported in the academic literature (Zhang and Byrd, 2006). Developing after school programs with substantial fitness components can assist students with weight management, resulting in long term health benefits, while supporting their academic and personal development.

The spring 2006 issue of The Future of Children is entirely devoted to childhood overweight and obesity. In their review of the topic, the authors discuss a number of factors contributing to the rising rates of childhood obesity including environment, biology and behavior. As stated in the introductory article by Paxson, Donahue, Orleans and Grisso (2006, p.3), “The problem is not the lack of explanations for the increase in
childhood obesity, but the abundance of them.” An ecological perspective that accounts for the many factors that contribute to this problem is needed in order to address the issue fully. These factors include the physical, social, policy, genetic and biological responses, as well as behaviors such as eating habits and physical activity. To address all of these areas would be well beyond the scope of this paper and so the latter component—physical activity—will be focused on. Moreover, the potential for physical activity in the context of out of school time programs will be explored. It should be noted that out of school time (OST) programs include both before and after school activities, however, they will be referred to as “after school programs” throughout this paper as this is the most recognized term.

How have children’s levels of physical activity changed? According to one source (Crute, 2005), more than 50% of schools have eliminated physical education. Yet the article goes on to say that research has demonstrated that even one hour of physical education per week can have a significant positive impact in terms of obesity on young children. Unfortunately, data consistently shows that opportunities for children to be physically active are decreasing (IOM, 2004a; IOM, 2004b; Satcher, 2006). Action for Healthy Kids (2005) has created fact sheets that clearly outline the scope of the childhood inactivity and related obesity problem (www.actionforhealthykids.org). Some highlights from this data include:

- Poor diet and inadequate physical activity are the second leading cause of death in the United States and together account for at least 300,000 deaths annually.
- Nine million American children are overweight, triple the number in 1980.
- Childhood obesity is more prevalent among minority populations.
More than 38% of students watch television 3 or more hours per average school day.

Fewer than 25% of American children get at least 30 minutes of any type of physical activity every day.

The vast majority (between 70 and 80%) of overweight children and adolescents continue to be overweight in adulthood or will become obese adults.

Childhood weight problems can lead to complications such as elevated blood pressure and cholesterol, joint problems, Type II diabetes, gallbladder disease, asthma, depression and anxiety.


The problem is clear—most children don’t get enough physical activity and the consequences are devastating. Fueling this problem are ever rising academic demands that place schools in the unenviable position of pushing their student’s academic performance ever higher while trying to meet the students’ social, physical and psychological needs. In an attempt to bolster academic achievement, many schools have paradoxically opted to decrease time for recess and cut back on physical education. In particular, “NCLB (No Child Left Behind Act) has put pressure on schools to spend less time on physical education and more time preparing for make-or-break standardized tests...ironic given the link between fitness and academic success” (Crute, 2005, p.26).

In fact, rates of participation in daily physical education classes have decreased from 42 percent in 1991 to 33 percent in 2005 (McSherry Breslin, 2006). An estimated 20% of
elementary schools have replaced recess with more classroom time (Satcher, 2005). Yet we know that this approach can have detrimental effects on multiple levels.

From a developmental perspective, physical activity and movement have been theorized to promote the development of spatial and temporal thinking—underpinnings for later math skills (Scarr, Weinberg & Levine, 1986). Other research shows that it can be an important tool for self-regulation (Williams & Schellenberber, 1996), even reducing the symptoms of ADHD (Attention Deficit Hyperactivity Disorder) when provided on a frequent and regular schedule (Putnam, 2004). Exercise, or physical activity, has been shown to improve both behavioral compliance as well as academic performance (Putnam, 2004; Fraser-Thomas, Cote, & Deakin, 2005). Indeed, according to Dr. John Ratey, a Harvard psychiatrist, "...exercise causes a huge increase in the growth factors in the brain." (McSherry Breslin, 2006) In addition to all these benefits related to improved academic achievement, exercise is a cornerstone for weight management. Thus the research shows that physical activity is beneficial on many levels—cognitive, behavioral as well as physical. More time for exercise must be allotted and given the constraints that schools face, "implementing obesity-prevention strategies in after-school programs presents an attractive option for many schools, because it may present fewer conflicts with the schools’ academic mandates" (Paxson et al., 2006, p.12).

According to the Action for Healthy Kids organization, "study after study proves what educators have long believed to be true: when children’s exercise and fitness needs are met, they have the cognitive energy to learn and achieve" (Action for Healthy Kids, 2003, p.1). They go on to state that over 200 studies have demonstrated the positive
effect of physical activity on school performance. The evidence of the benefits of physical activity is so strong that the National Association for Sport and Physical Education (as quoted in the policy guidelines of the School Nutrition Association) has issued recommendations “for at least 60 minutes and up to several hours of physical activity per day for children 5 to 12 years of age”. The recommendations go on to say that “children should have several opportunities for physical activity lasting 15 minutes or more approximately every two hours, especially during the daytime hours”. (School Nutrition Association, 2005, p.2)

After school programs present a viable and logical venue in which to address the exercise needs of children. This is especially true in light of the fact that participants in after school programs tend to over represent lower income and ethnic minority groups, both of which have higher rates of overweight and obesity as compared to their peers (Paxson et al., 2006). Providing exercise in after school settings therefore works toward decreasing health disparities experienced by these groups and equalizes the opportunity for all children to be physically active in a safe setting. This is especially important given that “youth sport programs are becoming increasingly expensive, competitive and elitist…cultures around the world are experiencing the institutionalization of youth sports, which is leading programs to become increasingly inaccessible to many families” (Fraser-Thomas et al., 2005, p.20). In addition to organized club sports being financially beyond the reach of many children and their families, physical activity is also limited by concerns regarding children’s safety in public spaces such as parks. Research has shown a direct link between perceived neighborhood safety and children’s outdoor activity levels. (Weir, Etelson, Brand, 2006)
In their review of 21st Century Community Learning Centers, a national government funded after school initiative, Zhang and Byrd (2006) state that 20-25 percent of participants were considered overweight based on the Body Mass Index (BMI) scores. In their recommendations for future directions in after school programs, they state “one such program strength that should be expanded is within the realm of physical education and obesity prevention...after-school programs are playing an increasingly important role in providing opportunities for youths to fulfill their needs for sports and fitness activities” (Zhang & Byrd, 2006, p.4).

Given what we know about the many physical and cognitive benefits of physical activity, the decreasing opportunities for children to be physically active and the accompanying increase in rates of obesity and overweight among children, we need to take action. In an American Public Health Association publication on the topic of childhood obesity entitled, The BIG Picture, Kim (2008, p.1) states that, “Obesity results from a complex interplay of physiological, psychological, environmental, and cultural factors. Successful treatment and prevention efforts require input and support from all members of the community, including families, schools, healthcare providers, community organizations and policymakers.” Many innovative initiatives are underway such as the creation of more numerous and safer parks (www.earthshare.org) and increasing media and television program messages to children encouraging them to be active (www.pbs.org). Physical activity programs in after school settings are another excellent avenue to reach many of the children most in need of such programs. School districts must create policies and programs in line with their student's needs—in this case, the need to be physically active.
Policy Development

Policy development and program planning are complimentary and in fact overlapping processes. Policy guides programs but program assessment and evaluation in turn can shape the policy process. Although assessment of student health and activity status as well as current school policy would ideally precede new policy formation, assessment will be covered later within the program planning discussion.

The 2004 Child Nutrition Reauthorization Act (P.L. 108.265 Section 204) mandates that schools receiving funds through the federal school meals program have wellness policies in place as of the 2006-2007 school year. The scope of these policies, as stated in the act, are to cover nutrition and physical activity both during the school day and in out of school time programs—including after school programs. This directive from the federal government is aligned with the research and data reviewed thus far. However, this law is by no means the only call to policy changes. The Institutes of Medicine (2004) has studied and reported on the subject. Their fact sheet addressing the role of schools in childhood obesity prevention states that, “Schools should ensure that all children and youth participate in a minimum of 30 minutes of moderate to vigorous physical activity during the school day. Furthermore, physical activity opportunities available through the school should be expanded, including intramural and interscholastic sports programs, and other physical activity clubs, programs and lessons that meet the needs and interests of all students...coordinated changes in the classroom curriculum, the in-school advertising environment, school health services, and after-school programs all offer the potential to advance obesity prevention efforts.” (IOM, 2004b, p.2) In addition, the Healthy People 2010 campaign (2000) lists physical activity and overweight and
obesity as their top two health priorities and provides several specific goals and objectives for schools to address:

- **Goal:** Increase daily physical activity among children and adolescents.
- **Objective 22-6:** Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days.
- **Objective 22-7:** Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardio-respiratory fitness 3 or more days per week for 20 minutes per occasion.
- **Objective 22-12:** Increase the proportion of the Nation’s public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours (i.e., before and after the school day, on weekends, and during summer and other vacations).
- **Objective 22-14b:** Increase the proportion of children and adolescents aged 5-15 years who walk to school.
- **Objective 22-15b:** Increase the proportion of children and adolescents aged 5-15 years who bike to school.

Creating a school wellness policy that supports (among other wellness initiatives) physical activity in after school programs is pivotal for providing guidance in the program planning process and provides a standard by which programs can be evaluated. Although most school districts adopted a wellness policy to meet the Child Nutrition Reauthorization Act requirements, these policies will need to be revisited and revised to ensure ongoing validity and utility. Several specific tools have been developed to help with policy development on this topic.
Action for Healthy Kids (2002) outlines an 8-step process. Within each of these 8 steps, objectives including guiding questions and multiple resources are offered in order for local school districts to create meaningful and appropriate policies for their district.

The steps are:

1. Conduct initial homework.
2. Form the development team.
3. Assess the district’s needs.
4. Draft a policy.
5. Build awareness and support.
6. Adopt the policy.
7. Implement the policy.
8. Maintain, measure, evaluate.

Each of these steps is central to the development of quality policy and programs.

However, step two is especially important to ensure fair representation and awareness of multiple stakeholders’ points of view. Quoting from this step entitled *Form the development team:*

The primary objective driving this step is collecting a diverse group of people to serve on the team. The federal legislation in fact requires that parents and administrators contribute to the development process... Take a look at the makeup of the team, and propose making some adjustments if it doesn’t reflect a diversity of interests. Ask yourself these questions:

- Are any parents involved?
- Does the team reflect all of the constituencies whose conduct will be shaped by the policy? This includes food service personnel, principals, physical education staff, school nurses, registered dieticians, the school board, and even the community at large (including local hospitals, youth organizations and others).
- Do students have a say?
Are there representatives included on the team that have recognized expertise and knowledge about nutrition, physical fitness, and student health and wellness?

The National Alliance for Nutrition and Activity (NANA) convened more than 50 health, nutrition and educational professionals to develop model policies for local districts to use. These policies can be implemented “as is”, phased in gradually or adapted to meet local districts’ needs. The model policies developed by NANA were created with assistance or support of an broad array of federal and state agencies representing many stakeholder groups, including the aforementioned Action for Healthy Kids, the American Cancer Society, the American Diabetes Association, the American Dietetic Association, the American School Health Association, the Harvard School of Public Health—Partnerships for Children’s Health, the National Association for Health and Fitness, the National Education Association, the National PTA and School Boards Association among many more.

The policies developed by this diverse group of stakeholders can be found in their entirety at the coalition’s website found at www.nanacoalition.org. Highlights that pertain to physical activity in after school programs include the policy goal stating “all students in grades K-12 will have opportunities, support and encouragement to be physically active on a regular basis” (NANA, 2005, p.7) as well as the following policy directives:

- **Physical Activity Opportunities Before and After School.** All elementary, middle, and high schools will offer extracurricular physical activity programs, such as physical activity clubs or intramural programs. All high schools, and middle schools as appropriate, will offer interscholastic sports programs. Schools will offer a range
of activities that meet the needs, interest, and abilities of all students, including boys, girls, students with disabilities, and students with special health care needs. After school child care and enrichment programs will provide and encourage—verbally and through the provision of space, equipment, and activities—daily periods of moderate to vigorous physical activity for all participants.

- **Safe Routes to School.** The school district will assess and, if necessary and to the extent possible, make needed improvements to make it safer and easier for students to walk and bike to school. When appropriate, the district will work together with local public works, public safety, and/or police departments in those efforts. The school district will explore the availability of federal “safe routes to school” funds, administered by the state department of transportation, to finance such improvements...

- **Use of School Facilities Outside of School Hours.** School spaces and facilities should be available to students, staff and community members before, during and after the school day, on weekends, and during school vacations. These spaces and facilities also should be available to community agencies and organizations offering physical activity and nutrition programs. School policies concerning safety will apply at all times.

These model policies go on to provide guidance regarding assuring and monitoring implementation as well as evaluation. In addition, the NANA website lists multiple resources for policy development including three which target physical activity and several more specifically targeting physical activity opportunities before and after school. These are located in Appendix 1.
In the model school wellness policies created by the School Nutrition Association--SNA (2005) the following physical activity policies are offered:

➢ Schools are encouraged to provide community access to and encourage students and community members to use the school’s physical activity facilities outside of the normal school day.

➢ Schools encourage families and community members to institute programs that support physical activity, such as a walk to school program.

➢ After-school programs will encourage physical activity and healthy habit formation.

These resources and model policies provide ample guidance for creating wellness policies at the local school district level. The policies that local districts create, in turn will guide the program planning and implementation efforts that will ultimately meet the needs of children. This process is discussed next.

**Program Planning**

Planning of programs is a multi step process optimally beginning with assessment. Assessment of student’s fitness levels and schools’ current fitness promotion efforts can be accomplished in multiple ways. Several data sets already exist that provide helpful of information. One of these is the Youth Risk Behavior Surveillance System--YRBS (2005), which provides data on tobacco, drug and alcohol use, sexual and dietary behavior, as well as physical activity and other youth behaviors. Data is presented at national, state and local levels allowing for comparison at multiple levels and monitoring.
of these behaviors on a bi-annual basis. The most recent data available nationally is from 2005 though some states have posted data for 2007.

With regard to physical activity, the YRBS survey asks students to evaluate whether they have met currently recommended levels of physical activity—60 or more minutes of moderate exercise 5 days of the week. It also assesses whether students have participated in any exercise at all, how often they have physical education (P.E.) and if they spend more than 20 minutes exercising during most P.E. classes. In addition, it asks students to self evaluate their level of involvement in sports and their television viewing habits. It should be noted that data is only collected for 9th through 12th grade students, which poses obvious limitations on the utility of this assessment tool in elementary school settings. However, in terms of evaluating a school district, the YRBS can provide helpful information regarding which areas of youth behavior are greatest areas of concern in later school years thereby providing direction for programs at younger levels.

School health programs and policies are assessed through the Centers for Disease Control (CDC) via the School Health Programs and Policies Survey--SHPPS (2006). This is “a national survey periodically conducted to assess school health policies and practices at the state, district, school, and classroom levels. SHPPS was most recently conducted in 2006. SHPPS also was conducted in 2000 and 1994; the next SHPPS is planned for 2012.” This survey examines what schools are providing in terms of education on health topics including diet and physical activity.

An excellent baseline measurement tool available through the CDC is the School Health Index--SHI (2006). The SHI is available free of charge and assistance for
carrying out the survey can be obtained without cost as well. More information is available at http://www.cdc.gov/HealthyYouth/SHI/FAQ.htm. The following is an excerpt from the website listed above, describing the SHI:

The School Health Index is a self-assessment and planning guide developed by the Centers for Disease Control and Prevention (CDC) that enables schools to

- Identify the strengths and weaknesses of their school health promotion policies and programs.
- Develop an action plan for improving student health.
- Involve teachers, parents, students, and the community in improving school policies, programs, and services.

The policies and practices recommended in the School Health Index are derived from CDC’s research-based guidelines for school health programs, which identify the policies and practices most likely to be effective in improving youth health risk behaviors. The SHI currently addresses five health topic areas, including physical activity, healthy eating, tobacco-use prevention, unintentional injury and violence prevention (safety) and asthma. It also includes cross-cutting questions, which address policies and practices that apply to all five health topic areas.

Schools can also conduct their own assessments based on their unique environments and circumstances. These should include current levels of activity as well as students’ interests so that programs can be targeted to meet these. Assessments may take many forms including surveys, interviews, or focus groups. Objective data may also be sought through measuring students’ BMIs and examining current school physical activity offerings. Regardless of which assessments or combination of assessments is used, the assessment step provides information critical to guiding the development of programs aimed to increase students’ levels of physical activity. They also provide data that can be used to later evaluate the program’s success.

Following the assessment phase of program planning for after school physical activity programs, goals and objectives can be established which are specific to each
school district and even within each school. Based on these goals and objectives, program activities can be chosen which will produce the outcomes that a school district is seeking. Using a logic model to map this process can provide a helpful visual tool for understanding and communicating the program’s resources, activities and planned outcomes. An example of what such a basic logic model might look like for an after school physical activity program can be found in Figure 1 below. More details on how to use logic models in program planning can be found in the *Kellogg Foundation Evaluation Handbook* (1998).

This process must occur cognizant of potential funding for the proposed program. Program funding sources may be public or private, grants or donations. In order to keep after school programs affordable, grant sources should be explored. Resources are listed in Appendix 2.

Figure 1. Basic Logic Model for Physical Activity Based After School Programs

<table>
<thead>
<tr>
<th>Resources</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>Walking Club</td>
<td>Students moderately active 30 min. or more 5 days/week</td>
<td>Students gain lifelong active interests</td>
<td>Healthier school and local community.</td>
</tr>
<tr>
<td>Students</td>
<td>Dance Club</td>
<td>Students gain lifelong active interests</td>
<td>Students are healthier and better able to learn.</td>
<td></td>
</tr>
<tr>
<td>Funds</td>
<td>Games and “cooperative” sports</td>
<td>Students vigorously active 20 min. or more 3 days/week</td>
<td>Students’ rates of overweight and obesity are decreased.</td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td>Intramural sport program</td>
<td>Students gain lifelong active interests</td>
<td>Students are healthier and better able to learn.</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Community Members</td>
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<tr>
<td>Businesses</td>
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Also important to the program planning process is the consideration of guiding theories. In the document *Theory at a Glance* (Glanz, Rimer & Su, 2005), the authors state that, “Theory provides a road map for studying problems, developing appropriate interventions, and evaluating their successes.” When planning a physical activity based after school program, especially one that targets childhood overweight and obesity, theories at community, interpersonal and individual levels all can apply. Because multiple factors are influential, an ecological perspective is needed. Community level theories help address these multiple factors by involving many stakeholders, encouraging teamwork and resource sharing, and community empowerment. For a program such as the one outlined in the logic model above, a community level theory guides the various individuals and groups to provide the tools and resources necessary to perform the program’s activities. At the interpersonal level, social cognitive theory, which “explores the reciprocal interactions of people and their environments and the psychosocial determinants of health behavior” (Glanz, Rimer & Su, 2005, p.19) can provide guidance. This theory looks at both the individual’s sense of confidence in their ability to take action and overcome barriers as well as model from other’s behavior. Lastly, individual level theories such as the Health Belief Model (Glanz, Rimer & Su, 2005) can help to guide our program efforts by leading planners to consider obesity and physical activity in light of students’ perceived susceptibility, perceived severity (of obesity), perceived benefits and barriers (to physical activity), cues to action and self-efficacy. In addition to these, many other theories exist that can also be chosen to guide the program planning process.
Program evaluation is another key part of the program planning process. This is especially true in the case of obesity prevention efforts such as physical activity based after school programs. The Institute of Medicine’s report, titled *Preventing Childhood Obesity: Health in the Balance* (2004), states repeatedly that efforts are needed to evaluate programs aimed to reduce childhood obesity. The report states that although it is critical to act now on the available evidence, some of which has already been cited in this paper, more research is needed to develop a broad and robust evidence base. Evaluations should be both process and outcome oriented and be performed in conjunction with (or by) outside evaluators whenever possible, using unbiased methods.

**Program Models**

A wide variety of after school programs and program models exist. Advocacy by organizations such as the After School Alliance have helped to generate a wide variety of programs available to many students. According to this organization, however, over 15 million children in the U.S. do not have access to quality after school care, resulting in higher incidence of crime and higher likelihood of academic failure. (www.afterschoolalliance.org). The alliance is a public-private partnership that aims to expand quality after school programs in conjunction with the U.S. Department of Education’s 21st Century Community Learning Centers--21st CCLCs, (http://www.ed.gov/programs/21stcclcl/index.html). After school programs such as these are primarily geared toward improving academic achievement though they can also provide recreational and other health related opportunities. The 21st CCLCs represent the federal government’s efforts in providing after school care.
Statewide efforts such as California’s CANFit program (California Adolescent Nutrition and Fitness Program, 2004) include guidance for after school programs and have demonstrated impressive results. CANFit has supported over 60 after school programs, realizing that the potential for after school programs to improve the health of students is enormous. In their report, *Promoting Health and Preventing Obesity in After School Programs: Critical Issues to Consider*, CANFit states that, “after school programs could and should serve as a community conduit for modeling, disseminating, and re-enforcing positive messages about food and physical activity” (p.1). In particular, they emphasize that after-school physical activity should complement the more typically competitive physical education programs with “developmentally appropriate non-competitive activities such as walking clubs, gymnastics, dance, body conditioning, or yoga” (p.4). (www.canfit.org)

Private national and statewide after school program models abound. Action for Healthy Kids markets a program called “Recharge”—details can be found at their website www.actionforhealthykids.com. SPARK (CANFit, 2007) is a physical activity and education program that can be adopted by after school programs (www.sparkpe.org), as is NikeGO (CANFit, 2007), which is based on SPARK and provides training, equipment and curriculum guidance to provide standards based programs (www.nike.com/nikebiz/nikego). Many other commercial programs are available including Champions (KLC School partnership), After School Stars, Team-Up for Youth, Sports4Kids and Sport for All—each of which is geared toward serving schools (Harvard Family Research Project, 2004).
Some unexpected after school program sources also exist and demonstrate the value of partnering with community and business resources. The Dairy Council of California, for example, has created the Deal Me In food and fitness after school program designed to introduce and reinforce healthy eating and physical activity. The Medical College of Georgia has created a FitKid Project to provide moderate to vigorous physical activity after school, especially for students from low-income families. The Community Health Development and Advocacy staff at Children’s Healthcare of Atlanta developed an after school program to reduce cardiovascular risk factors such as obesity through physical activity for high-risk children. These and many other programs can be reviewed in greater detail at the Out of School time @ Harvard Family Research Project’s (2004) website: http://www.gse.harvard.edu/hfrp/projects/afterschool/evaldatabase.html. This website also provides research and data regarding each programs effectiveness.

However, programs need not necessarily be national or state wide in scope, nor be created by an outside entity. In fact, some of the best programs can be grassroots efforts at the local level. Dothan Brook School in Wilder, Vermont, for example, has created several excellent out of school time physical activity programs. The physical education teacher pioneered a walking club at the school, which has grown to include all grade levels. Morning playground time is encouraged for children who arrive at school early to be active in a supervised setting. School leaders working together with state and local officials, including police, championed a walk and ride to school program that has successfully seen hundreds of kids walking or riding their bikes to school with supervision from parent and staff volunteers. This latter program is part of the Safe Routes to School project. In addition, the school counseling staff facilitated the Girls on
the Run program, led by students from nearby Dartmouth College, for 3rd through 5th grade girls to develop physical fitness and social skills. The neatoday article, Growing Pains (Crute, 2005) cites many more examples of grassroots efforts such as these. Furthermore, teaming with Parks & Recreation departments can provide further opportunities for students to be physically active after school.

Conclusion

Promoting and enhancing physical activity in after school programs is an important part of a multi-faceted effort that must be launched to counter the rising rates of overweight in our nation’s youth. After school programs are an excellent venue for children to not only learn about healthy nutrition and exercise choices but to actively participate in physical activity on a daily basis. Resources and successful examples abound. Schools must partner with other community stakeholders to form health councils or advisory boards that can engage in the process of policy and program planning efforts around after school programs, with the goal of improving children’s health.
Appendix 1: Resources for policy development from NANA

- Guidelines for school and community programs to promote lifelong physical activity among young people (www.cdc.gov/mmwr/preview/mmwrhtml/00046823.htm)

- Healthy People 2010: Physical Activity and Fitness, the Center for Disease Control and Prevention and the President’s Council on Physical Fitness and Sports. (www.healthypeople.gov/document/HTML/Volume2/22Physical.htm#_Toc490380803)

- Physical Fitness and Activity in Schools, American Academy of Pediatrics. (http://pediatrics.aapublications.org/cgi/reprint/105/5/1156)

- Guidelines for After School Physical Activity and Intramural Sport Programs, National Association for Sport and Physical Education www.aahperd.org/naspe/pdf_files/pos_papers/intramural_guidelines.pdf

- The Case for High School Activities, National Federation of State High School Associations www.nfhs.org/scriptcontent/va_custom/vimdisplays/contentpagedisplay.cfm?content_id=71


- KidsWalk to School Program, Centers for Disease Control and Prevention www.cdc.gov/nccdphp/dnpa/kidswalk/

- Walkability Check List, Pedestrian and Bicycle Information Center, Partnership for a Walkable America, U.S. Department of Transportation, and U.S. Environmental Protection Agency www.walkinginfo.org/walkingchecklist.htm
Appendix 2: Funding Sources for After School Programs

- Federal Funding Basics, Types of Federal Funding and Major Federal Funding sources Supporting Afterschool found at http://afterschool.gov/docs/federalFunding.html

- Promising Practices in Afterschool provides over 40 links to afterschool funding information including grant writing guidance. Found at http://www.afterschool.org/funding.cfm

- An After School Funding Guide found at http://www.nonprofitexpert.com/after%20school.htm

- Guidance for starting an afterschool program found at http://www.afterschoolalliance.org/start_a_program.cfm

- Funding Information Database for After school Programs found at http://www.afterschoolalliance.org/funding_data3.cfm?Program_ID=1
References


