

# **Early Assessment of Programs and Policies to Prevent Childhood Obesity**

## **Comprehensive School Physical Activity Programs**

### **Evaluability Assessment Synthesis Brief**

**2009**

## SUGGESTED CITATION

Pitt Barnes, S., Robin, L., Dawkins, N., Leviton, L., & Kettel Khan, L. (2009). *Early Assessment of Programs and Policies to Prevent Childhood Obesity Evaluability Assessment Synthesis Brief: Comprehensive School Physical Activity Programs*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Available at <http://www.cdc.gov/nccdphp/dnpao/index.html>

*The findings and conclusions of this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.*

## ACKNOWLEDGMENTS

This project is a collaborative effort led by a team from the Robert Wood Johnson Foundation (RWJF); the Centers for Disease Control and Prevention's (CDC) Division of Nutrition, Physical Activity and Obesity, Division of Adolescent and School Health, and Division of Adult and Community Health's Prevention Research Centers Program Office; and the CDC Foundation. The project team is advised by the Funder's Advisory Committee, which includes representatives from the RWJF, the National Institutes of Health, the U.S. Department of Agriculture (USDA), WK Kellogg Foundation, and Kaiser Permanente. IFC Macro, an ICF International Company, serves as the coordinating center for the project.

We are grateful to the staff at the school districts for welcoming members of our project team to their sites and allowing us to learn more about their exemplary efforts. It is evident that there is a lot of energy and enthusiasm in the schools as it relates to the implementation of the comprehensive school physical activity program. We applaud the tremendous efforts that schools have put forth in promoting health and wellness among students and staff.

# TABLE OF CONTENTS

---

<b>I.</b>	<b>Introduction .....</b>	<b>1</b>
	Background.....	1
	Purpose of Early Assessment.....	1
	Focus Areas .....	1
	Relevant Literature .....	2
<b>II.</b>	<b>Methods.....</b>	<b>3</b>
	Nomination of Programs .....	3
	Criteria and Selection of Programs for Evaluability Assessments .....	3
	Comprehensive School Physical Activity Program Evaluability Assessments .....	3
	Data Analysis .....	4
<b>III.</b>	<b>Background .....</b>	<b>5</b>
	Setting Characteristics .....	5
	Development of Programs .....	5
	Goals and Outcomes of CSPA Programs.....	5
	Target Audience .....	5
<b>IV.</b>	<b>Logic Model .....</b>	<b>6</b>
	Inputs .....	6
	<i>Funding</i> .....	6
	<i>Staffing</i> .....	6
	Activities and Outputs .....	6
	<i>Physical Education</i> .....	6
	<i>School-Based Physical Activity Opportunities</i> .....	7
	<i>Family- and Community-Oriented Physical Activities</i> .....	8
<b>V.</b>	<b>Evaluation Activities .....</b>	<b>9</b>
<b>VI.</b>	<b>Discussion .....</b>	<b>10</b>
	Plausibility.....	10
	Feasibility.....	10
<b>VII.</b>	<b>Key Lessons Learned.....</b>	<b>11</b>
<b>VIII.</b>	<b>Conclusion .....</b>	<b>12</b>
	<b>References .....</b>	<b>13</b>

## **Appendices**

- A. Description of Selection Criteria
- B. Local Wellness Policy Interview Topics
- C. Comprehensive School Physical Activity Program Logic Model

# I. INTRODUCTION

---

## BACKGROUND

Early Assessment of Programs and Policies to Prevent Childhood Obesity was a 2-year project to identify and assess local-level programs and policies that have been implemented with apparent success to prevent obesity by improving the eating habits and physical activity levels of children aged 3 to 17 years. In each year of the project, a systematic search process identified programs and policies, and then an expert panel suggested further exploration of the most promising programs and policies. Priority was given to programs and policies that addressed low-income populations and ethnic groups with disproportionate childhood obesity.

## PURPOSE OF EARLY ASSESSMENT

As the search for answers to effectively address childhood obesity continues, organizations and communities across the country are experimenting with various strategies aimed at changing children's environments to prevent obesity. The Systematic Screening and Assessment (SSA) Method is a new evaluation approach to identify and assess several innovations being implemented in the field within a relatively short period of time. Innovations are assessed both for their potential impact on health outcomes and their readiness for evaluation.

As part of the SSA Method, evaluability assessments were used to assess the plausibility and feasibility of selected programs and policies that were identified as promising during the search process and selected by the project's expert panel. Evaluability assessment is a process in which evaluators work with program administrators and stakeholders to determine an initiative's readiness for evaluation (Patton, 1997). It involves clarifying goals and program design by specifying the program model, determining stakeholders' views on the important issues, and exploring program reality (Wholey, 2004). Evaluability assessments can help determine whether a rigorous evaluation study (e.g., an experimental evaluation such as a randomized control trial) is feasible and merited for a particular program or policy. As such, they can help avoid premature investment in rigorous evaluation of programs or policies that have not been adequately implemented and allow evaluation resources to be targeted to programs or policies deemed ready for rigorous evaluation.

## FOCUS AREAS

During the second year of the project, the Funder's Advisory Committee identified four thematic areas: child care programs and policies in afterschool and day care settings, programs or policies increasing access to healthier foods, comprehensive school physical activity programs, and the built environment. Synthesis reports have been prepared for each of these thematic areas.

This synthesis report focuses on the evaluability assessments conducted on comprehensive school physical activity (CSPA) programs. CSPA programs encompass programming before, during, and after the school day (National Association for Sport and Physical Education, 2008). These programs are implemented in elementary, middle, and high schools and provide physical activity opportunities for all students. Goals of the program are to provide physical activity opportunities that enable students to accumulate a total of 60 minutes of physical activity per day. NASPE recommends that a CSPA program include: quality physical education; school-based physical activity opportunities;

school employee wellness and involvement; and family and community involvement. Physical activity opportunities can include recess, physical activity breaks and movement during instruction, intramurals or physical activity clubs, interscholastic sports, and walk and bike to school initiatives (National Association for Sport and Physical Education, 2005).

This report describes the extent to which CSPA programs have been implemented and the limitations of implementation in one school and one school district. The report concludes with lessons learned and recommendations to inform future implementation by district and school personnel and other key decision makers.

## **RELEVANT LITERATURE**

Among children aged 6 to 11 years, 33.3% are overweight or obese; among adolescents aged 12 to 19 years, 34.1% are overweight or obese (Ogden, Carroll, & Flegal, 2008). Physical inactivity is one of the leading causes of childhood obesity (Wang, Gortmaker, Sobol, & Kuntz, 2006). With millions of children and adolescents enrolled, schools play a critical role in making physical activity possible through quality physical education and other school-based opportunities (Wechsler, McKenna, Lee, & Dietz, 2004). According to the 2007 Youth Risk Behavior Survey, only 34.7% of students reported being physically active for a total of at least 60 minutes per day on 5 or more days per week (Eaton et al., 2008). The U.S. Dietary Guidelines for Americans recommend that young people (aged 6 to 19) participate in at least 60 minutes of physical activity daily (U.S. Department of Health and Human Services & U.S. Department of Agriculture, 2005). For this reason, the Centers for Disease Control and Prevention (CDC) and the National Association for Sport and Physical Education (NASPE) recommend a comprehensive approach to enhancing physical education and physical activity in schools to increase students' engagement in physical activity (Lee, Burgeson, Fulton, & Spain, 2007; National Association for Sport and Physical Education, 2008).

## II. METHODS

---

### NOMINATION OF PROGRAMS

The project team solicited nominations for CSPA programs between September and October 2007 from schools and districts across the United States through postings on a variety of listservs (e.g., the Comprehensive Health Education Network) and through direct contact with the CDC's Division of Adolescent and School Health project officers and funded school health program coordinators. Nominated programs were eligible for inclusion in the project if the program: (1) was a school-based physical activity program; (2) provided the opportunity for students to engage in at least 30 minutes of moderate to vigorous physical activity during each school day (when combined with activity in physical education class to equal at least 60 minutes of physical activity); (3) promoted physical activity opportunities to and/or included ALL students; (4) included a physical education component that offered instruction at least 3 days per week; (5) included a written curriculum; (6) had physical education standards that were consistent with national and/or State standards for physical education; (7) prohibited waivers or exemptions for participation in other school- or community-sponsored activities; (8) offered at least two of the following physical activity strategies: recess for elementary school students, physical activity breaks and movement during instruction, intramurals or physical activity clubs, or walk and bike to school initiatives; (9) offered interscholastic sports at the middle or high school level; (10) had been in existence for more than 6 months; and (11) had not been rigorously evaluated. A total of 30 programs were nominated; 7 met our criteria for inclusion and were reviewed by the expert panel.

### CRITERIA AND SELECTION OF PROGRAMS FOR EVALUABILITY ASSESSMENTS

We convened a panel of 15 experts in evaluation, measurement, physical activity, school-aged youth, and community programs in January 2008. Specific criteria to select programs for evaluability assessment were developed by the project team in collaboration with the expert panel. These criteria included potential impact of the program; innovativeness; reach to target population; acceptability to stakeholders; feasibility of implementation; feasibility of adoption; sustainability; generalizability; and staff and organizational capacity of the implementers (see Appendix A for a detailed description of each criterion). The expert panel reviewed summaries of each of the seven comprehensive school physical activity programs, scored each program on each criterion through an Internet-based survey tool, and made recommendations on which programs would receive evaluability assessments. After each panel member scored each policy and discussed each program as a group, four CSPA programs were recommended for evaluability assessments (EA). The expert panel recommended three programs be combined into a cluster EA with a single site visit because they were a part of the same district and shared many program components. The panel recommended a total of two evaluability assessments.

### COMPREHENSIVE SCHOOL PHYSICAL ACTIVITY PROGRAM EVALUABILITY ASSESSMENTS

Each EA involved (1) a review of background documentation about the program; (2) the development of a program logic model to outline program goals and activities; and (3) a 2.5-day site visit, in which trained site visitors assessed implementation, data collection, and evaluation capacity through interviews with program staff and partners. One school was visited in Washington and one

school district was visited in West Virginia. Each evaluability assessment site visit was conducted by two site visitors who traveled to the program. Interviews were conducted with individuals involved with the program, such as school district personnel, principals, physical education teachers, parents, community partners, and other stakeholders. Interview questions addressed program development, implementation, evaluation, and funding (see Appendix B for the full list of interview topics). The project team and expert panel reviewed the findings from all the evaluability assessments to determine the degree of promise of the programs and their readiness for rigorous evaluation.

## **DATA ANALYSIS**

Site visit reports were created from each site visit and were the primary data sources for this synthesis report. Reports were analyzed for themes using open coding of qualitative data (Bernard, 2000). Three team members initially identified codes in the texts of the site visit reports. Each individual developed codes independently after reviewing the site visit reports, then compared and discussed similarities and differences to arrive at a single comprehensive list of codes for analysis (Patton, 2002). One team member then coded all reports from each site. ATLAS.ti (version 5.0) was used to categorize and sort data within codes. Secondary data sources included expert panel preliminary review perspectives and expert panel post-site visit recommendations. Site visitors have reviewed a draft of the results section of this report for accuracy of interpretation.

## III. BACKGROUND

---

### SETTING CHARACTERISTICS

The two sites selected to receive an evaluability assessment included one high school in Washington with 6,339 students and one school district in West Virginia with 13,519 students. These two school settings, both rural, served a majority White student population with free and reduced-price lunch rates that were below 50% (18% in Washington and 40% in West Virginia).

### DEVELOPMENT OF PROGRAMS

The two CSPA programs are longstanding. The high school CSPA program in Washington was created in 1997 with quality physical education as the cornerstone with the addition of various physical activity opportunities for students and staff over time. Three physical education teachers created and still run the program. In West Virginia, their CSPA program is part of a larger district-wide health initiative. The larger district-wide health initiative began out of a concern regarding overweight and cardiovascular risk factors among students in the county. Health screenings were the initial component of the program, followed by various healthy lifestyle interventions. The CSPA program is one component of this larger initiative that focuses on physical activity. The initiative was created and is still headed by a dedicated director.

### GOALS AND OUTCOMES OF CSPA PROGRAMS

The primary goals of both CSPA programs are to encourage physical activity at school, provide students with the necessary skills to engage in proper physical activity, and expose students to a variety of physical activity opportunities to find activities they enjoy. Expected outcomes of both programs included: meeting state physical education standards; increased opportunities for physical activity; increased knowledge, attitudes, motor skills, and confidence needed to adopt and maintain physically active lifestyles among students; improved performance; development of lifetime activity skills and interests; and increased student time engaged in moderate and vigorous activity overall (in and out of school).

### TARGET AUDIENCE

The primary target audience for the comprehensive school physical activity programs is all students enrolled in the high school in Washington and all elementary school students in the district in West Virginia.

## IV. LOGIC MODEL

---

As part of the EAs, each program developed a logic model describing inputs and activities and outputs. An example of a logic model is provided in Appendix C. The following section describes a) inputs and b) activities and outputs from each of the two programs.

### INPUTS

#### *Funding*

Outside of physical education teacher salaries (which are paid by the district in both sites), funding sources varied for each program. At the high school in Washington, the annual physical education department budget was set by the school and ranged from \$5,000 to \$7,000 annually. It was expected that there would be a 10% decrease in the 2008–2009 budget. In West Virginia, however, their larger district-wide health initiative, of which CSPA is a part, was funded primarily through grants totaling more than \$700,000 over the life of the initiative, which began in 2001. It was not clear how much of this funding was dedicated to CSPA or to schools specifically for its implementation; however, funding was not used to support teacher time directly.

#### *Staffing*

The two CSPA programs were staffed with qualified physical education teachers, who regularly engaged in physical education professional development. Both programs considered physical education understaffed for the number of students enrolled. For example, at the high school two-thirds of the student population (approximately 650) enrolled in daily physical education classes with three physical education teachers. Due to the large class sizes (i.e., 40 to 45 students), the daily 2-year physical education requirement and interest from students in physical education, a need for additional physical education teachers exists at the high school in Washington. As a result, limited opportunities are available before and after school because staff are overwhelmed by their physical education classes and additional responsibilities. In fact, the ability to offer opportunities for physical activity outside of the traditional school day is at the discretion of the physical education staff.

### ACTIVITIES AND OUTPUTS

#### *Physical Education*

Quality physical education is the cornerstone of both CSPA programs. At the high school in Washington, 2 years of physical education is required for graduation, and is offered on a daily basis for 50 minutes. The physical education courses in the high school emphasized “lifetime” activities, which include types of physical activities that adults engage in, such as weight training, dance, golf, and tennis. Physical education courses also focused on improving performance, in accordance with F.I.T.T.R (frequency, intensity, type, time, and reversibility), which is a basic philosophy of what is necessary to gain a training effect from an exercise program. The high school offered a variety of options for physical education, including freshman-year physical education that is required and treated as an “exposure” year to a variety of lifetime sport and activities, focusing on the basic skills needed to enjoy various physical activities for a lifetime (e.g., how to train for a marathon). Upper-level, elective physical education courses allowed students to “specialize” in activities that interest

them. In addition, every effort was made to increase participation in physical education through courses like Zero-hour PE, which was offered 1 hour before the school day began, and Saturday PE, which was offered on Saturday mornings. Both classes allowed students with full schedules, as well as any interested student, to participate in physical education class outside the regular school day.

At elementary schools, district-wide in West Virginia, the availability of physical education classes varied, with schools providing at least 90 minutes of structured physical education per week (three times per week). Two schools were successful in increasing their physical education class minutes because the 6th grade classes moved to the middle school. At the time of the site visit, the district was using grant funding to work with middle schools to increase physical education from one semester to a full year (initially, the total amount of physical education minutes would be spread out over the course of the school year, rather than compressed in a single semester). Although the amount of time for physical education would not be increased, classes would be spaced in a way to extend over the year. This process has been very challenging due to space and class schedule constraints.

In both CSPA programs, professional development, supported by the school district, is a top priority for implementing a quality program. In Washington, physical education teachers engaged in ongoing physical education training. In addition, the district has facilitated curriculum alignment for physical education to ensure that all physical education classes met the appropriate standards. West Virginia, with funding from the Carol M. White Physical Education Program Grant, offered numerous physical education and physical activity workshops for physical education teachers and classroom teachers. This district demonstrated an interest in ensuring all instructors received training in physical activity. For example, action-based learning trainings were conducted with physical education teachers, school nurses, health educators, and classroom teachers. In addition, the district created a professional development opportunity that allowed physical education teachers across the district to share ideas for instruction in physical education with each other, in partnership with a local university. In an effort to raise the level of physical education to that of core subjects, the district supported the development of a white book which outlined physical education requirements for each grade (pre-K through 12). The focus shifted from one of sports to one of life skills.

### **School-Based Physical Activity Opportunities**

In addition to physical education, these CSPA programs have implemented school-based physical activities to increase the amount of physical activity kids engaged in. In West Virginia, recess was available to all students for 15 to 20 minutes daily at the elementary school level. In some cases, teachers took students out in the afternoon for a second recess. Other elementary school activities included: dances, action-based learning activities, 1-mile walks, and brain break activities. In one school, grant funding was used to purchase a bag of physical activity equipment for each classroom teacher to use on the playground.

Elementary schools also sponsored physical activity events during the school day. For example, one school hosted a physical education day where students in each grade took turns doing a range of activities focused on fitness and eating right and were awarded prizes. Another school sponsored “Relay for Life” for 2 years that promoted physical activity. Other schools have also sponsored “turn off the television” challenges to promote physical activity and awarded prizes.

Both CSPA programs also provided faculty and staff fitness opportunities. For example, faculty and staff were able to use athletic equipment at school. In addition, physical activity promotion activities for staff included Biggest Loser contests and providing incentives such as pedometers.

School facilities were also open to the community. For example, West Virginia community members used the gymnasiums during the evenings and on weekends. Walking tracks, fields, and playgrounds are also used by the community.

### ***Family- and Community-Oriented Physical Activities***

Each CSPA program made an effort to promote physical activity for family and community members. In West Virginia, the district offered \$500 mini-grants to parent-teacher associations to organize family events promoting physical activity. The schools visited during the site visit hosted family events multiple times throughout the year (e.g., poster contests, Dance Revolution exhibits, skating rink events, and bowling). One school's physical education teacher also maintained a Web site where families could access MyPyramid or the American Heart Association's Web site for additional information on physical activity. Another physical education teacher occasionally sent home calendars that noted physical activities families could do together all month long. In Washington, a number of community organizations, including the local Parks and Recreation Department, offered intramural sports opportunities to high school students and these activities were strongly supported by the community.

## V. EVALUATION ACTIVITIES

---

Although conducting evaluation is not a formal component of these CSPA programs, program administrators were strongly interested in better understanding the impact of their CSPA program on students. At the high school in Washington, all three physical education teachers were interested in evaluation. They were particularly interested in answering the following questions: What is the potential impact of the program after graduation? Is the high school doing the right thing in terms of course offerings? What do parents think of the program? What are the long-term outcomes of the physical education program on students? How is academic success affected by their quality physical education program?

In West Virginia, schools collected some data including: height, weight, and blood pressure as part of annual health screenings. In addition, they conducted screenings for Acanthosis nigricans (a brown to black velvety hyperpigmentation of the skin caused by elevated level of insulin and associated with obesity and diabetes mellitus), collected data on activity levels from random samples of students, and surveyed students on how active they were in physical education class. They also documented changes in physical activity in classrooms through surveys.

Both CSPA programs lacked sufficient staff and resources to carry out a comprehensive evaluation of their CSPA program. In West Virginia, the district partnered with the director of the Department of Public Health and a faculty member at a local university to conduct some evaluation. The high school in Washington was considering partnering with a local university to assist with evaluation. With this support for evaluation and additional funding, these programs could have the capacity to conduct a comprehensive evaluation.

## VI. DISCUSSION

---

### PLAUSIBILITY

Comprehensive school physical activity programs are built on scientific evidence that supports students being active for at least 60 minutes per day as one strategy to prevent childhood obesity (National Association for Sport and Physical Education, 2008). The CSPA programs in West Virginia and Washington are great examples of programs that seek to provide all kids with multiple opportunities to engage in physical activity during the school day. Physical education is one component of the program that appeared to be implemented systematically for both programs. In both programs, physical education was taught by teachers who were certified and engaged in ongoing professional development. In addition, physical education classes in both programs were filled with movement, activity, and creativity. The amount of physical education class time was a challenge for West Virginia's program, in which the amount of physical education fell short of meeting national recommendations of 150 minutes of physical education per week (National Association for Sport and Physical Education, 2001), even though it met State requirements (90 minutes per week). Administrators for both programs recognize the benefit of solid physical education and continue to strive to improve what is made available to students. In addition, schools make a variety of physical activity opportunities available for students, drawing on the experience, creativity, knowledge, and training of school staff. Teachers make a concerted effort to reach all students with school-based physical activities, striving to attain 60 minutes of physical activity, which is challenging. If both programs were expanded to systematically include a broad range of opportunities outside of physical education, they could supplement current efforts to increase physical activity among students. Coupled with proper nutrition, physical activity is a key piece of the equation in preventing obesity through comprehensive obesity prevention programs in schools.

### FEASIBILITY

The CSPA programs in West Virginia and Washington currently include physical education and various school-based opportunities for physical activity. Support for implementation of these programs is provided through multiple opportunities: collaboration among physical education teachers and other classroom teachers, available professional development, and willing district and school administrators. Both programs take advantage of opportunities to continue to add physical activity to the school day through integrative learning, before-school activities, and active physical education classes. The lack of a strategic plan for both programs, however, limits their ability to determine if both programs are being implemented fully. Implementation is limited by current challenges within the school system including meeting national standards for physical education which faces challenges due to insufficient staff, scheduling, space, and time constraints. In addition, both programs benefit greatly from the commitment school personnel make to providing physical activity opportunities outside of physical education. These activities, although limited, are products of the willingness and creativity of dedicated staff. Full implementation in these and other school settings is possible but would need a strategic plan, strong administrative support, financial support, and dedicated staff to fully implement a CSPA program.

## VII. KEY LESSONS LEARNED

---

Key lessons were learned about the implementation of CSPA programs through the evaluability assessments. These lessons are outlined below. See Table 1 in Appendix B for recommendations.

- CSPA programs require one or more physical activity champions at the district and school levels to identify the physical activity needs and to support building-level implementation.
- A strong commitment from administrators for quality physical education is critical. Because of the challenges of staff, space, and time constraints, a commitment from administrators ensures that physical education is a priority.
- Funding is critical for CSPA programs. Funding is not only needed for physical education, but particularly for opportunities for physical activity outside of physical education.
- A quality physical education program needs to be the cornerstone of any school-based program. It allows students to learn the necessary skills to engage in physical activity.
- Physical activities before, during, and after school need to be implemented regularly and systematically to impact all students.
- Maximizing use of outdoor space (e.g., walking trails, play equipment, playgrounds) increases opportunities for physical activity not only for students and staff, but also for community members.
- Schools and CSPA programs greatly benefit from collaborations with community organizations that are able to provide opportunities and resources for physical activity.
- Physical activity professional development is essential for both physical education teachers and traditional classroom teachers.
- CSPA programs would benefit from using the Physical Education Curriculum Analysis Tool to analyze physical education curricula (Centers for Disease Control and Prevention, 2006).
- More physical activities need to be targeted toward staff to encourage positive role modeling.
- State Departments of Education need to provide support through policies to ensure that districts and schools provide sufficient time for daily physical education and professional development and technical assistance in developing comprehensive school physical activity programs.
- Regular monitoring and evaluation are necessary to identify ways to improve CSPA programs.

## VIII. CONCLUSION

---

Comprehensive school physical activity is still a relatively new concept, and these programs have the potential to significantly impact the health of youth attending school. However, CSPA programs require support beyond physical education. State and district support is needed to implement a broad range of activities before, during, and after school. In addition, financial resources are necessary to adopt curricula, hire certified physical education teachers, and promote school-based physical activity. Furthermore, policies are critical to creating a culture of physical activity in schools. If these steps are taken, schools can fully implement comprehensive programs that promote physical activity throughout the entire school day.

## REFERENCES

---

- Bernard, H. R. (2000). *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Centers for Disease Control and Prevention. (2006). *Physical education curriculum analysis tool*. Atlanta, GA: Author.
- Eaton, D., Kann, L., Kinchen, S., Shanklin, S., Ross, J., Hawkins, J., et al. (2008). Youth risk behavior surveillance—United States, 2007. *Morbidity and Mortality Weekly Report*, 57(SS-4), 1–131.
- Lee, S., Burgeson, C., Fulton, J., & Spain, C. (2007). Physical education and physical activity: Results from the School Health Policies and Programs Study 2006. *Journal of School Health*, 77(8), 435–463.
- National Association for Sport and Physical Education. (2001). *Physical education is critical to a complete education*. Reston, VA: Author.
- National Association for Sport and Physical Education. (2005). *Understanding the difference: Is it physical education or physical activity?* Reston, VA: Author.
- National Association for Sport and Physical Education. (2008). *Comprehensive school physical activity programs* [Position statement]. Reston, VA: Author.
- Ogden, C. L., Carroll, M. D., & Flegal, K. M. (2008). High body mass index for age among US children and adolescents, 2003–2006. *Journal of the American Medical Association*, 299, 2401–2405.
- Patton, M. Q. (1997). *Utilization-focused evaluation: The new century text*. Thousand Oaks, CA: Sage.
- Patton, M. Q. (2002). *Qualitative research methods & evaluation methods*. Thousand Oaks, CA: Sage.
- U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2005). *Dietary guidelines for Americans, 2005* (6th ed.). Washington, DC: U.S. Government Printing Office.
- Wang, Y., Gortmaker, S., Sobol, A., & Kuntz, K. (2006). Estimating the energy gap among U.S. children: A counterfactual approach. *Pediatrics*, 118, 1721–1733.
- Wechsler, H., McKenna, M. L., Lee, S. M., & Deitz, W. H. (2004). The role of schools in preventing childhood obesity: Childhood obesity. *The State Education Standard* (pp. 4–12).
- Wholey, J. S. (2004). Evaluability assessment. In J. S. Wholey, H. P. Hatry, & K. E. Newcomer (Eds.), *Handbook of practical program evaluation* (pp. 33–62). San Francisco, CA: Jossey-Bass.

---

# **APPENDIX A**

## **DESCRIPTION OF SELECTION CRITERIA**

---

## DESCRIPTION OF SELECTION CRITERIA

---

**Potential Impact.** The intervention may affect the social or physical environment pertinent to healthy eating and active living—changing an individual’s behavior. Potential impact is assessed based on the intervention’s conceptual logic and other pertinent characteristics, such as intensity and duration. Estimate of impact is based on “face value,” program documents, and brief expert input from funding organization staff and contractors, and other experts who know the intervention but are independent from it.

**Innovativeness.** The intervention is new, different, or a significant variation of an existing intervention. Emphasis on innovativeness may be mitigated if the intervention represents an intervention type or category that is prevalent or of particular interest to the group and collaborating organizations.

**Reach to Target Population.** The likelihood or actual evidence that the intervention will achieve participation (and even retention and completion) by the target population (i.e., approximately what percentage of the target population is likely to or actually does participate in or is “reached” in some other way by the intervention).

**Acceptability to Stakeholders.** The potential or actual evidence that the intervention is acceptable and even attractive to pertinent collaborators, gatekeepers, and other necessary groups, such as schools, businesses, government agencies, and grassroots groups.

**Feasibility of Implementation.** The likelihood that the intervention as designed can be fully implemented given the clarity of its goals, objectives, and strategies; complexity and leadership requirements; financial and other costs; and training and supervision requirements. If evidence exists regarding program implementation, then feasibility refers to the intervention “on paper” has been fully and faithfully implemented and the degree of difficulty in achieving implementation.

**Feasibility of Adoption.** The potential for similar sites or entities to adopt the intervention.

**Intervention Sustainability.** The likelihood that the intervention can continue over time without special resources or extraordinary leadership.

**Generalizability.** The degree to which the intervention demonstrates or has potential to be adapted for other populations and settings.

**Staff/Organizational Capacity.** Sponsoring organization and staff have the capacity to participate fully in a brief assessment, learn from it, and further develop the intervention.

---

# **APPENDIX B**

## **LOCAL WELLNESS POLICY INTERVIEW TOPICS**

---

# LOCAL WELLNESS POLICY INTERVIEW TOPICS

---

During the site visits, we hope to learn more about the local wellness policy in your school district. Some of the topics that we would like to discuss with the identified interviewees include the following:

## LEAD ADMINISTRATORS

- Background and history of the policy
- Development of policy regarding nutrition, physical activity, wellness promotion
- Prior needs assessment activities and their findings
- Challenges and barriers to development and implementation of policy
- Strategies for addressing political, financial, and human resources factors
- Policy's goals, expected outcomes, activities, and services regarding nutrition, physical activity, and wellness promotion
- Support from the school district and community organizations
- Administrator's role and responsibilities
- Profile of community and student population
- Community awareness, involvement, and reaction
- Policy's reach to target audience
- Current or potential partnerships
- Policy success(es)
- Key lessons learned with overall experience
- Modifications to the policy since its adoption
- Evaluation plan
- Data collection, outcomes, and data sources
- Financial resources, funding challenges, and future funding mechanisms
- Startup costs, ratio of costs across policy components, and cost of administration

## PRINCIPALS

- Principals' role in developing and implementing the policy
- Policy's goals, expected outcomes, activities, and services regarding nutrition, physical activity, and wellness promotion
- Support from the school district and community organizations
- Challenges and barriers of implementing policy

- Strategies for addressing political, financial, and human resources factors
- Profile of community and student population
- Community awareness and involvement
- Policy’s reach to target audience
- Current or potential partnerships
- Success(es) of the policy
- Key lessons learned with overall experience
- Modifications to the policy since its adoption
- Evaluation plan
- Financial resources, funding challenges, and future funding mechanisms
- Startup costs, ratio of costs across policy components, and cost of administration

## **FACULTY AND STAFF**

- Staff members’ role in developing and implementing the policy
- Policy’s goals, expected outcomes, activities, and services regarding nutrition, physical activity, and wellness promotion
- Challenges and barriers of implementing policy
- Other key staff
- Profile of community and student population
- Community awareness, involvement, and reaction
- Policy’s reach to target audience
- Current or potential partnerships
- Success(es) of the policy
- Key lessons learned with overall experience
- Modifications to the policy since its adoption
- Data collection activities
- Financial resources, funding challenges, and future funding mechanisms

## **SCHOOL DISTRICT PARTNERS IN LOCAL WELLNESS POLICY**

- Partners’ involvement, role, and responsibilities in developing and implementing the policy
- Policy’s goals, expected outcomes, activities, and services regarding nutrition, physical activity, and wellness promotion
- Community awareness and involvement

- Challenges of partnership
- Benefits from partnership
- Other potential partners
- Policy success(es)
- Key lessons learned from experience with the policy
- Funding sources and their effect on partnership

## **EVALUATORS**

- Evaluators' role and responsibilities in developing, implementing, and evaluating the policy
- Policy's goals, expected outcomes, activities, and services regarding nutrition, physical activity, and wellness promotion
- Reach target audience
- Community awareness, involvement, and reaction
- Other potential partners
- Policy success(es)
- Evaluation design
- Data collection activities and methods
- Data analysis and results dissemination
- Key lessons learned from experience with policy and evaluation efforts
- Financial resources, funding challenges, and future funding mechanisms

## **OTHER STAKEHOLDERS**

- Background and history of the policy
- Policy's goals, expected outcomes, activities, and services regarding nutrition, physical activity, and wellness promotion
- Stakeholders' role and involvement with the local wellness policy
- Community awareness, involvement, and reaction
- Other potential partners
- General impression of the local wellness policy
- General impact of specific changes in physical activity or eating behavior
- Policy success(es)
- Key lessons learned from policy experience
- Knowledge of policy's funding

**Table 1. State-, District-, and School-Level CSPA Recommendations**

<b>Districts and schools should:</b>
<ul style="list-style-type: none"><li>■ Develop a strategic plan to facilitate growth, prioritize activities, and garner support</li><li>■ Increase before- and afterschool opportunities for physical activity district-wide</li><li>■ Identify resources and champions to assist with implementing physical activity</li><li>■ Develop an evaluation plan to systematically monitor and improve implementation</li><li>■ Conduct analysis of physical education curricula using the Physical Education Curriculum Analysis Tool (Centers for Disease Control and Prevention, 2006)</li><li>■ Promote physical activity among staff</li><li>■ Coordinate physical activity for family and community members</li></ul>
<b>States should:</b>
<ul style="list-style-type: none"><li>■ Assist with policy development to ensure that districts and schools provide sufficient time for daily physical education</li><li>■ Provide support to districts and schools through professional development and technical assistance in developing comprehensive school physical activity programs</li></ul>

---

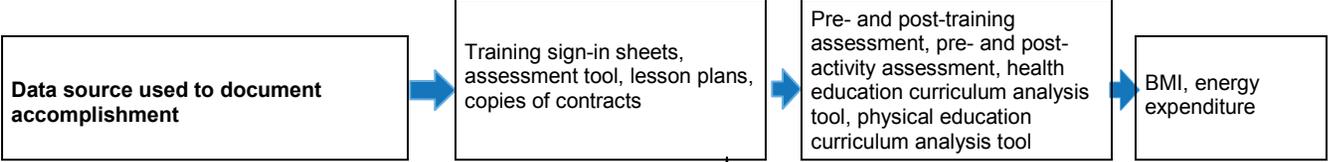
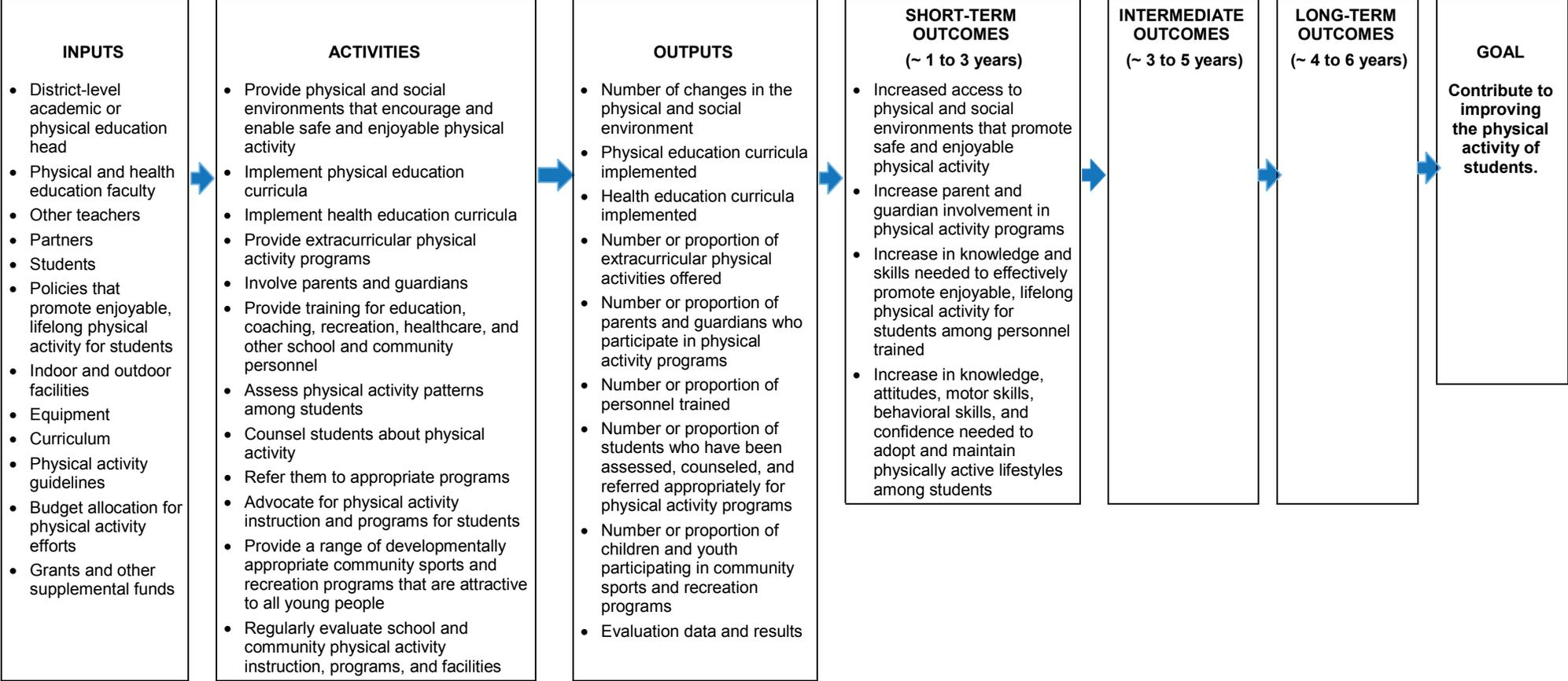
# **APPENDIX C**

## **COMPREHENSIVE SCHOOL PHYSICAL ACTIVITY PROGRAM LOGIC MODEL**

---

# COMPREHENSIVE SCHOOL PHYSICAL ACTIVITY PROGRAM LOGIC MODEL

**Problem Statement**  
Regular physical activity contributes to obesity prevention. Schools play a critical role in preventing childhood obesity.



**Contextual Factors**  
Leadership; School culture; Demographics of the student population; Community demographics; Socioeconomic status