Early Assessment of Programs and Policies to Prevent Childhood Obesity

Local Wellness Policies

Evaluability Assessment Synthesis Report

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We are grateful to the staff at numerous schools 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 local wellness policy. We applaud the tremendous efforts that schools have put forth in promoting health and wellness among students and staff.

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I. INTRODUCTION

BACKGROUND

Early Assessment of Programs and Policies to Prevent Childhood Obesity is 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 early assessment model is a process to screen environmental interventions for those that promise to be most effective in preventing childhood obesity, but lack empirical evidence about their effectiveness. Identifying these most promising projects could potentially lead to more rigorous evaluations in the future.

As part of the early assessment process, the evaluability method was 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 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 first year of the project, the Funder's Advisory Committee identified three thematic areas: child care programs and policies in afterschool and day care settings, programs or policies increasing access to healthier foods, and local wellness policies (LWPs). Synthesis reports have been prepared for each of these thematic areas.

This synthesis report focuses on the evaluability assessments conducted on LWPs. It describes the extent to which LWPs have been implemented and the limitations of implementation in six school districts across the nation. 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). With approximately 55 million children and adolescents enrolled in schools (grades K to 12), schools can play a critical role in influencing health, particularly healthy eating and physical activity, among children and adolescents (U.S. Census Bureau, 2006; Wechsler, McKenna, Lee, & Deitz, 2004).

In recognition of the role that schools play in improving health and in response to the growing obesity epidemic, Congress passed the Child Nutrition and Women, Infants, and Children (WIC) Reauthorization Act of 2004, which required each school district participating in a federally funded meal program to establish a local wellness policy (LWP). The LWP should include nutrition guidelines for all foods and beverages available on school campuses during the school day; set goals for nutrition education, physical activity, and other school-based activities designed to promote student wellness; and describe how implementation of the policy will be monitored. School districts were also required to involve parents, students, the local school food authority, the school board, and school administrators in the development of the policy. School districts were expected to adopt the policy by August 2006 and were encouraged to implement the policy. Technical assistance for policy development, implementation, and evaluation was provided by federal agencies (Department of Health and Human Services and the Department of Education) to states that, in turn, provided technical assistance to school districts. A number of national organizations also provided technical assistance, such as Action for Healthy Kids and the School Nutrition Association.

Research suggests that school health programs can promote healthy eating and physical activity among children and adolescents; however, limited data exist as to the impact of policies on these behaviors (Centers for Disease Control and Prevention, 1996, 1997; Gortmaker et al., 1999; Hoelscher et al., 2004). A recent study to assess school health policies and programs found that only 17.0% of districts required that schools make beverages meeting specific nutritional standards, such as bottled water or low-fat milk, available to students. In addition, only 6.6% of district policies required that schools make fruits and vegetables available to students whenever food was offered or sold (O'Toole, Anderson, Miller, & Guthrie, 2007). When physical activity was examined, only 67.8% of elementary schools provided daily recess for students in all grades (Lee, Burgeson, Fulton, & Spain, 2007). As demonstrated by these data, before the law requiring LWPs, districts and schools had very few policies and practices in place that promoted healthy eating and physical activity. As a result, it is important to understand the extent to which LWPs have been implemented and the implications for school health.

II. METHODS

Nomination of Programs and Policies

The project team solicited nominations for LWPs between March and May 2007 from school 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 Centers for Disease Control and Prevention's (CDC) Division of Adolescent and School Health project officers and funded school health program coordinators. Nominated policies were eligible for inclusion in the project if they were adopted by a school district; implemented in multiple district schools during the 2006-2007 school year; included all of the required components of the wellness policy; had not been previously evaluated; and had been monitored over a period of time. Policies that met our inclusion criteria were examined further based on the content and quality of the written policy using specific criteria (see Appendix A for a list of criteria) that addressed the use of evidence-based methods for promoting behavior change. For example, one criterion stated, "Physical education is offered daily (i.e., 150 minutes per week at the elementary school level, 225 minutes per week at the high school level)." Each criterion received a score of 1 point if the criterion was addressed in the policy or 0 points if the criterion was not addressed in the policy. The scores for each policy were totaled, then policies were rank ordered based on the scores. The highest-scoring policies (ranging from 0 to 49 points) were reviewed by the expert panel. A total of 146 policies were nominated, 58 met our criteria for inclusion, and the 25 highest-scoring policies were reviewed by the expert panel.

CRITERIA AND SELECTION OF POLICIES FOR EVALUABILITY ASSESSMENTS

We convened a panel of 15 experts in evaluation, measurement, nutrition, physical activity, schoolaged youth, and community programs in March 2007. Specific criteria to select policies for evaluability assessment were developed by the project team in collaboration with the expert panel. These criteria included potential impact of the policy; 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 B for a detailed description of each criterion). The expert panel reviewed prepared summaries of each of the 25 highest-scoring local wellness policies, scored each policy on each criterion through an Internet-based survey tool, and made recommendations on which policies would receive evaluability assessments. After each panel member scored each policy and discussed each policy as a group, six LWPs were recommended for evaluability assessments.

LOCAL WELLNESS POLICY EVALUABILITY ASSESSMENT SITE VISIT

Each evaluability assessment involved (1) a review of background documentation about the program or policy; (2) the development of a program or policy 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 district per state was visited in Arizona, Minnesota, New Mexico, and Texas and two districts were visited in Wyoming. Each evaluability assessment site visit was conducted by two site visitors who traveled to the school districts. Interviews were conducted with individuals involved with the policy, such as school district personnel, principals, teachers, parents, community partners, and other stakeholders. Interview questions addressed policy development, implementation, evaluation, and funding (see

Appendix C for the list of questions). The project team and expert panel reviewed the findings from all the evaluability assessments to determine the degree of promise of the programs and policies 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 postsite visit recommendations. Site visitors have reviewed a draft of the results section of this report for accuracy of interpretation.

III. BACKGROUND

DISTRICT CHARACTERISTICS

School district enrollment ranged from 2,600 students across 10 schools to 41,444 students across 66 schools. Although the majority of students in three of the school districts were white, the other three districts were more racially and ethnically diverse. In two school districts, approximately 50% of the student body was Hispanic and in a third district 60% of the students were Asian American or African American. Four of the six school districts were in urban areas. Among the six school districts, 16% to 70% of students were eligible for free and reduced-price lunches (see Table 1).

OTHER HEALTH-RELATED POLICIES

Three districts had previous experience with school health and wellness at the district level before the 2004 Child Nutrition and WIC Reauthorization Act. In 2002, two school districts participated in the Urban School Health Leadership Institute that facilitated the development of an interdisciplinary wellness leadership team for each school district. The institute was sponsored by the American Cancer Society and CDC to help school districts develop a systematic and coordinated approach to addressing health and safety issues that interfere with student success. The third district had a physical education faculty member who was the dedicated lead for physical education and school health initiatives in the district before the mandate.

However, with the exception of LWPs, districts had few policies that addressed student health and wellness. One district had a policy that addressed each component of a coordinated school health program as mandated by the state education agency. Four other districts had at least one policy that addressed one or more of the following: school nutrition services management, the free and reduced-price lunch program, prohibition of foods that did not meet specific nutritional standards from being sold in school nutrition services areas, graduation requirements for physical education, and the creation of healthy and safe environments. Only one district had a policy that addressed what foods and beverages could be brought into the school by students and parents.

DEVELOPMENT OF THE LWPS

All six school districts intensively involved key stakeholders in the policy development process. In general, LWPs were developed by small teams of individuals (i.e., writing teams) representing school districts (e.g., assistant superintendent, director of student services, director of school nutrition services, director of health services), schools (e.g., principals, teachers, parents, and students), and communities (e.g., local health department representatives, community-based organizations). Writing teams were often a subcommittee of the districtwide school health advisory council or wellness committee, although in one district the writing team included three district-level administrators (the school nutrition services director and assistant director, and the director of curriculum), who presented the policy to the school health advisory council for review. Wellness committees were most commonly led by school nutrition services staff at the district level. Although the composition of wellness teams varied, they were most likely to include district-level school nutrition and student health services representatives, dietitians, principals, school board members, health and physical education teachers, parents, and community members (representing the medical community, public health department, and university).

All LWPs were developed after a review of resources, including Federal and State nutrition guidelines, national and State physical education standards, and sample policies from State and national organizations. State Action for Healthy Kids documents were also a common resource for policy development.

Two school districts used the coordinated school health program (Joint Committee on Health Education and Promotion Terminology, 2001) and the learner support framework (Adelman & Taylor, 2005) to develop their policy. The learner support framework shifts resource teams in middle schools from a focus on case management to a broader focus on the environment.

GOALS AND OUTCOMES OF THE LWPS

The six LWPs included goals that varied in content and degree of specificity. Most goals were consistent with the required nutrition and physical activity components of the LWP. The goals addressed the provision of nutritious meals and snacks, nutrition education, opportunities to increase physical activity, and the creation of healthy school environments. Policies also addressed instilling lifelong healthy behaviors related to healthy eating and physical activity. For example, a common nutrition education goal was that each school would offer a sequential, interdisciplinary, comprehensive standards-based curriculum designed to provide students with the knowledge and skills necessary to promote healthy and enjoyable eating habits that last a lifetime. Four of the six policies were prescriptive, outlining in detail how goals were to be achieved. These policies generally used strong language such as "will offer" and "shall offer." The two less prescriptive policies either recommended activities that could be implemented to achieve goals or indicated that schools "will strive" to meet specified goals.

All six LWPs stated that nutrition guidelines for reimbursable school meals would be at least as restrictive as the *Dietary Guidelines for Americans* established by the U.S. Department of Agriculture (USDA) and the Department of Health and Human Services. In addition, three school districts specified adherence to State-level nutrition standards for reimbursable meals in their policies.

Each school district outlined in varying degrees of specificity, guidelines for foods and beverages available on school campuses outside of the school meal program (i.e., competitive foods) (Institute of Medicine, 2007). Five of the six policies referenced national nutrition guidance (i.e., *U.S. Dietary Guidelines*) as the basis for the district's nutrition guidelines for competitive foods. Two districts also referenced State nutrition standards as the basis for the district's nutrition guidelines for competitive foods. All six LWPs (whether included in the policy or as an additional document) provided some guidance about the types of foods and beverages that should be offered to, or restricted from, students. This guidance ranged from lists of suggested food and beverage items to detailed lists of foods and beverages with specified portion sizes, calorie count, fat content, and/or comparisons of good and better food and beverage choices. For example, one district's policy specified the following: all foods and beverages in each school must meet the district standards for foods and beverages; choices will not exceed 2.5 servings; single-serving-size snacks should have no more than 6 grams of fat; milk, water, 100% juice, and sports drinks are allowed; and only fruits, dried fruits, and vegetables prepared/packaged without added fat, sugar, sodium, or coatings other than those used for food preservation are allowed.

Less commonly noted were standards for physical activity or physical education. Only one school district referenced national physical education standards for its policy guidance.

Staff developed logic models that describe many of the expected outcomes of the policy implementation (see Appendix D for a sample logic model). In general, short-term (1–3 years) outcomes included full implementation of the LWP; increased availability of healthier food and beverage options in schools; more alternative or healthier fundraising events, parties, or snack options; and increased parent and community awareness and involvement. Less common were short-term outcomes for increasing professional development, opportunities for physical activity, and staff wellness. Intermediate (3–5 years) outcomes included increased consumption of healthier foods and beverages, increased academic scores, and increased physical activity among students. Although less commonly noted on the logic models, long-term (4–6 years) outcomes focused mainly on measured improvements in weight status as measured by body mass index (BMI).

Across all six districts, stakeholders agreed on the goals, activities, and outcomes of their LWP. Each district identified some level of initial opposition to the policy from stakeholders (e.g., parents, students, and school personnel), which had since been largely overcome. When interviewed, stakeholders discussed the logic model created by the project staff for their school district. Stakeholders were positive and agreed with the logic model components (inputs, activities, outputs, and outcomes).

Each district's policy was expected to include a plan for measuring implementation, including designating one or more persons within the district or at each school charged with operational responsibility for ensuring that each school fulfilled the district's LWP. In general, local wellness policies identified either the superintendent or members of the school health advisory councils as having oversight of implementation. Local wellness policies included an annual report component describing the policy's implementation to school boards. Local wellness policies for all six districts lacked detailed descriptions on how monitoring and evaluation would be conducted.

TARGET AUDIENCES

The primary target audience for all six LWPs was all students in the district enrolled in grades K to 12. Three school districts also identified district- and school-level staff, parents, and community members as part of their target audience.

IV. LOGIC MODEL

As part of the evaluability assessments, each district developed a logic model describing inputs and activities and outputs. An example of a logic model can be found in Appendix D. The next two sections describe (a) inputs and (b) activities and outputs from each of the six districts.

INPUTS

Funding

Districts receive few or no resources for the full implementation of LWPs. Despite this lack of direct funding, districts have been able to use a combination of Federal funds, State funds, district funds, and funding from local organizations to implement various aspects of LWPs. In the six districts, financial support for implementing the LWP primarily included Federal funding (e.g., Title I funds, Carol M. White Physical Education Program [PEP] grants). In one district, the State legislature appropriated \$115,199 to cover the costs of providing free breakfast for all students in seven elementary schools. Another district was able to appropriate \$57,500 of district funds for implementation. Funds were used to offset the revenue losses from vending machine changes, support a wellness coordinator position, support healthy school projects, and supplement nutritional provisions for school lunches and snacks. Two other school districts appropriated funds (up to \$10,000 in one district and up to \$30,000 in the other) to offset the projected loss in revenue that might have resulted from implementation of nutrition guidelines in the first year. Other sources of financial support came from local grants from companies and organizations (e.g., city council, State department of education).

In at least five of the six districts, school nutrition services absorbed much of the costs for implementing the LWP. The operating structure of school nutrition services varied from district to district, with some operating as nonprofits. As a result, it was essential that these entities not create a deficit due to increased costs of offering healthy foods. School nutrition services personnel across the districts agreed that serving more fruits and vegetables increased costs. One school district estimated a 1.5% increase in food and beverage purchasing costs, adjusted for inflation, due to changes resulting from the LWP. Some school nutrition directors reported offering the least expensive fruits and vegetables, and using some canned fruits and vegetables to keep costs down. One district increased the price of school lunch by 10 cents. In another district, school nutrition services funded the school health coordinator position, in part, with assistance from revenues supplied by Medicaid from student health services. School nutrition services also assumed costs related to printing, materials, and other resources to support the policy.

The financial impact of the change of vending options varied across school districts. For example, in one district, although \$30,000 was appropriated to cover vending machine revenue loss, only one school in the district reported a loss (of \$1,500). Another school district reported a 73% loss in commissions paid to schools for a 2-month period during the first year of policy implementation.

Funding for physical education was particularly difficult. Only two of the six districts were able to garner additional funding to hire more physical education teachers for the upcoming 2008–2009 school year.

Staffing

Of the six school districts, three had individuals at the district level dedicated to overseeing the implementation of the LWP, and two were affiliated with the school nutrition services department. These individuals had a strong presence in the schools in day-to-day policy management and made a significant impact on schools in achieving their goals. One reported to both the director of school nutrition services and the director of health services. In another district, a registered dietitian was hired.

District-level staff committed to implementing the LWP was critical. One district lost its district-level LWP champion to a new position. As the director of student services, this person headed the wellness program directly under the superintendent, and supervised the school nurses, physical education and health education teachers, and guidance counselors. The district decided not to fill this position and reorganized the program so the components were less integrated organizationally; no one directly reported to the superintendent. This was a great loss for the district and weakened the district's implementation of the LWP.

LWP implementation in all six districts benefited from having identified contacts at the school level or local champions. Four of the six school districts had school-level liaisons for the LWP. These liaisons included individuals (e.g., teachers and nurses) or small teams in schools that communicated with district-level personnel regarding the LWP or activities related to it.

School districts in this study partnered with other district-level entities and organizations and universities which facilitated the policy implementation because of the extra manpower the partnerships provided. Several district-level partnerships were identified, including the curriculum and instruction department, office of fund development (grant writing), and the business office. Partnerships with universities typically facilitated nutrition education and professional development for physical education instructors. Other partners included local public health departments and municipal departments of parks and recreation, whereby resources for nutrition education and physical activity could be leveraged.

ACTIVITIES AND OUTPUTS

None of the six local wellness policies was fully implemented. At the time of the evaluability assessment site visits, school districts and schools had just begun the second year of implementation. Participating school districts had made significant progress in implementing nutrition goals, but less progress in implementing physical activity goals.

Vending

The six districts had made great progress in implementing nutrition guidelines for vending machines. In two districts, vending was limited before the congressional mandate. In one district, soda was eliminated from vending machines in all schools in 2003. In the other district, there was never food vending at the elementary school level. In the two districts in which the vending contract was centralized at the district level, progress was quite visible. These districts, for the most part, had vending machines that were stocked with food and beverage options meeting nutritional standards.

During the first implementation year in one district, snack and beverage options meeting nutritional standards (e.g., water, flavored water, energy drinks, milk products, or juices) were phased into the

vending machines in 50% of schools. By October of the following school year, all vending machines in the district offered snack and beverage options meeting nutritional standards. In addition, all vending machines were on timers during the school day, which allowed limited opportunity for vending purchases. In this school district, vendors voluntarily offered more snack and beverage alternatives (at least 15 different alternatives) that met nutritional standards. However, vending machines in employee lounges at some schools still carried beverage options not meeting nutritional standards—sending a mixed message to students.

School Nutrition Services

A strong emphasis was placed on improving food quality for school meals across all six districts, from offering whole grains and reduced-fat dairy products to offering more baked foods and foods with reduced sodium. In one district, ensuring healthy, appealing, and culturally appropriate offerings was a top priority. The school district worked with a professional chef to improve its recipes, and also prepared ethnic foods. The district made an effort to identify the preferences of the students and to meet them (e.g., cutting apples and oranges because students prefer them that way). This district had a centralized nutrition service that prepared the food for all schools in the school district, which enabled them to standardize and control the food available districtwide. Another district placed health bars in schools. Health bars are buffet-style carts that offer a variety of fresh fruits and vegetables daily. Two health bars were placed in each of its 26 elementary schools, and several health bars were available at the secondary level as well. A third district promoted breakfast in the classroom, offering free, healthy breakfast for elementary school students in morning classes, instead of in the cafeteria. This program was implemented in half of the elementary schools in the district. Two districts were in the process of implementing (or had already implemented) USDA's Healthier US Challenge criteria in elementary schools and were working on expanding the guidelines to all schools. However, a variety of challenges remained with regard to nutrition in schools. For example, students did not have enough time to eat lunch according to staff. In addition, there was limited control at the school level to choose the foods they served, and increased costs were associated with serving more fruits and vegetables.

Fundraising and Special Events

The six school districts were struggling to conduct fundraising using foods that met nutritional standards or nonfood items. Many of the LWPs discouraged, but did not prohibit, teacher use of food as a reward and parent-supplied food for parties. One district limited classes to one birthday celebration per month, while another specified two events per year where foods not meeting nutritional standards could be served (e.g., cake). Across all districts there had been some degree of resistance from teachers, parents, and students regarding restrictions on fundraising and food for classroom celebrations.

Two districts had systems in place to monitor the foods and beverages used for fundraising activities and school-sponsored events. One district partnered with the district's business office, which reviewed the purchase orders, to ensure food options that met nutritional standards were available for students at school events or fundraisers. Purchase orders requesting foods and beverages for an event had to specify at least 50% of food and beverage options meeting nutritional standards. In addition, those interested in holding a fundraiser were required to participate in a training about the LWP and sign a memorandum of understanding regarding the LWP.

Nutrition Education

The provision of nutrition education across all grade levels was a challenge for the school districts. In general, nutrition education was not regularly or consistently offered to K to 12 students, and some of the staff who provided nutrition education lacked the necessary training.

Four of the six school districts identified a nutrition education or health education curriculum (including nutrition) that was being implemented. The two remaining school districts were either trying to identify a curriculum or had no nutrition or health education curriculum. For example, for the past 7 years the evidence-based Coordinated Approach to Child Health (CATCH) program was implemented in all elementary schools in one school district (Perry et al., 1990). The program integrates nutrition policy and education with physical education policy and curriculum.

The degree of implementation of nutrition education varied by district, and even more so by schools within the district. Across all districts, implementation of nutrition education was heavily targeted at the elementary school level and generally did not exist at the secondary level. Furthermore, only a fraction of schools in school districts that identified a nutrition education or health education curriculum actually offered nutrition education consistently. For example, in one school district only 14 of the 24 elementary schools offered nutrition education using a standard nutrition education curriculum and even then instruction occurred only once a month. In another district, nutrition education was provided on an as-requested basis. Teachers, however, were encouraged by school districts to integrate nutrition education into core subjects.

The National Health Education Standards (Joint Committee on National Health Education Standards, 2007) recommends that nutrition education be provided within a comprehensive health education curriculum and taught by trained teachers; however, only a small proportion of teachers in the districts that provided nutrition education were trained. Nutrition education teachers were most likely to receive training when the curriculum was first adopted, but refresher courses were less likely to be offered. Furthermore, new teachers who were not trained when the curriculum was initially adopted generally did not receive training on the nutrition education curriculum. In districts where teachers were encouraged to integrate nutrition education into core subjects such as math and science, many lacked the nutritional knowledge necessary for proper instruction. District and school personnel cited limited funding, competing demands for time, State requirements for a strong emphasis on academic instruction, and national and State testing as the primary reasons for the lack of nutrition education instruction and training.

Physical Education

In general, limited physical education was offered and limited opportunities for physical activity were available across all grade levels. In all six school districts, there was growing momentum for increasing the number of certified physical education teachers.

According to the National Association for Sport & Physical Education, the national recommendation for physical education is a minimum of 150 minutes per week at the elementary school level and 225 minutes per week at the middle and high school levels (National Association for Sport & Physical Education, 2005). Few of the districts and schools met this recommendation. In one school district, health and physical education time were combined at the elementary and middle school levels (90 minutes at the elementary school level and 200 minutes at the middle school level), making it difficult to determine how much physical education was being provided. At

the high school level, one credit (two semesters) of physical education was required for graduation. At another school district, elementary school students received 40 minutes of physical education once a week.

Although encouraged, before-, during-, and after-school physical activity remains a challenge to implement. Recess was available daily at the elementary school level in all six school districts and ranged from 20 to 40 minutes daily for elementary school students. Most LWPs encouraged schools to not remove recess opportunities as punishment and it was apparent that most schools were complying. Two districts provided districtwide in-service trainings on movement in the classroom (e.g., brain-based movement, Total Physical Response, Energizers). Many individual schools had after-school programs; however, programs focused on providing academic support with little opportunity for physical activity or lacked participation from students.

Participating district and school personnel cited many reasons for lack of a stronger emphasis on physical education, including weak State standards for physical education, limited budgets, competing demands for time, State requirements for a strong emphasis on other academic instruction, national and State testing, few physical education teachers, and poor scheduling. Furthermore, for many districts physical education was not centralized at the district level, and as a result the provision of physical education was left to the discretion of the school principal. For one district, the lack of progress was because of the lack of district-level staff responsible for physical education.

Other School-Based Activities

One common school-based activity that many of the six LWPs included was employee wellness promotion. Two districts made a concerted effort to promote employee wellness, with district-level support through a centralized health insurer. Health promotion activities across the two districts ranged from organized walking groups to health-related e-mail announcements regarding health assessments. Few schools in the remaining four school districts promoted employee wellness through activities such as walking groups, weight loss competitions, and by making student workout areas and equipment available to employees before and after school.

One district used healthy school plans (HSPs) to achieve policy goals at the school level. Each school was expected to submit two HSPs each school year that included activities addressing an LWP component (e.g., physical activity, nutrition, and education opportunities). In this district, funding was allocated for incentives for schools to carry out their HSPs. HSP activities ranged from creating a physical activity club to monthly label-reading sessions for students.

To encourage better nutritional intake among elementary school students in another school district, Recess Before Lunch (RBL) was promoted. As research suggests, RBL reduces classroom behavior issues and increases lunch consumption (Bergman, Buergel, Englund, & Femrite, 2004; Getlinger, Laughlin, Bell, Akre, & Arjmandi, 1996). Approximately half of the elementary schools in the school district implemented this program.

V. EVALUATION ACTIVITIES

Evaluation was not the primary responsibility of district and school personnel implementing the LWP and, as such, many of the six school districts had only a modest capacity to evaluate implementation of their LWP. Districts were seeking evaluation assistance from other district offices that focused on assessment or evaluation, or from evaluation consultants. Several districts identified partners for evaluation, such as the Alliance for a Healthier Generation or academic institutions.

LWP evaluation activities among the six school districts that were underway focused on single initiatives rather than on implementation of the LWP as a whole, and lacked regularity and coordination among the components of the policy in the schools. Two of the six districts reported using an assessment tool during the first year to determine what aspects of the policy were being used and how implementation was occurring. For example, one district translated the policy components and stipulations into an instrument with a three-way rating system for each ("in place/under development/not in place"). These tools were to be completed by school nurses and signed off by principals; however, it might have been more fruitful if the wellness policy team completed the tool rather than one individual.

All six school districts had data sources available that could be used to monitor aspects of their LWP including surveys on student health behavior and outcomes (e.g., the Youth Risk Behavior Survey), health and fitness assessments, student school meal participation rates, information about the nutritional content of school meals, competitive food sales summaries, measures of student BMI, and various training participation rates (including trainings on LWP, nutrition, and physical activity). These data sources, however, were not coordinated, compared analytically, or used to make improvements. Even in districts in which some process evaluation had taken place, little was done to use the data to inform program development or identify and provide technical assistance to help schools meet LWP goals.

VI. DISCUSSION

PLAUSIBILITY

The fundamental premise that has guided LWP development for many of the six school districts is that schools play a key role in promoting student health, and can prevent childhood obesity through proper nutrition and physical activity (Wechsler, McKenna, Lee, and Deitz, 2004). This foundation, along with using additional frameworks (e.g., learner support framework, coordinated school health approach) by two school districts in informing their policy, makes it plausible that LWP goals are achievable.

As a whole, the LWPs addressed the required components in a consistent and structured manner. The majority of the participating districts' policies used innovative approaches to address financial barriers to implementation (e.g., use of Title I funds, Carol M. White Physical Education Program [PEP] grants, and State and local organization funding).

It is plausible that full implementation of these LWPs will produce desired short-term outcomes. Specifically, achievable short-term outcomes include the availability of foods that meet nutritional standards during the school day and implementing physical activity opportunities at the elementary school level. In general, recess is offered daily, and physical education is available. Districts are making a concerted effort to meet the national physical education requirements despite barriers such as national and State standardized testing, which requires dedicated time for testing preparation, and shrinking budgets.

The LWPs can have a significant effect on the school environment of most students in these six school districts, with the extent of the impact varying given the different resources of each school district and school. The LWPs have increased awareness of the importance of healthy eating and physical activity among administrators, students, and parents. In addition, the availability of food and beverage options that meet nutritional standards has increased. In districts that serve a high proportion of free and reduced price school lunches, where students were more likely to consume breakfast and lunch at the school, the potential impact is even higher. Stronger community and parental support and involvement for carrying out the LWP are necessary for positive long-term outcomes.

FEASIBILITY

It is feasible that various policy components will be used as designed, as districts strive for systematic, districtwide implementation. As described, for most school districts participating in this project, carrying out the LWP is ongoing and incremental. Schools with strong interest in implementation and strong leadership are more likely to have applied key components of the policy. Using districtwide curricula for nutrition, physical education, and oversight from a fully functioning school health advisory council are critical for full policy implementation.

SUSTAINABILITY

Sustainability of various components of the LWPs is likely, despite the challenges experienced by the districts. Many schools have been successful in using low-cost strategies to implement LWPs.

However, many strategies rely on grant funding, which is less sustainable. Overall, sustainability is most likely achievable when aspects of the policy are implemented and controlled at the district level. In addition, sustainability is likely to occur when schools have the flexibility to tailor aspects of the policy to meet their needs. Sustainability is threatened when policy components rely on school-level implementation with district-level support, are not supported by State standards (e.g., physical education), and rely on external funding.

GENERALIZABILITY TO SIMILAR DISTRICTS IMPLEMENTING LOCAL WELLNESS POLICIES

Various LWP components, programs, and strategies in these six districts are generalizable to other districts. The most generalizable component of the LWPs is the nutrition guidelines. Districts with centralized vending contracts are able to provide uniform availability of healthy food and beverage options through vending machines. General programs or curricula used in these six districts included Recess before Lunch, Breakfast in the Classroom, and Coordinated Approach to Child Health (CATCH). It is likely that these programs could be transferred to other settings and adopted for different populations because the programs target school environments that are locally controlled and potentially modifiable (e.g., the school schedule, determining which competitive foods may be served on campus).

VII. KEY LESSONS LEARNED

Key lessons were learned through the evaluability assessment site visits about the planning, implementation, and evaluation of the LWP's mandated by the 2004 Child Nutrition and WIC Reauthorization Act. For many of the school districts, this law supported initiatives that were under way to improve the healthy eating and physical activity behaviors of school-aged children. For other school districts, it provided impetus to take the necessary steps toward improving these behaviors among children and adolescents. As a result of the policy, there has been an increased awareness among stakeholders about the need to improve opportunities for healthy eating and physical activity for school-aged youth and the role schools can play in promoting a healthy school environment.

Stakeholders developed the policy and formed coalitions, advisory councils, and committees with a focus on school health. Not only were wellness issues discussed regarding the policy, but a framework was developed whereby other school health issues could be discussed (e.g., asthma and mental health), and an opportunity to link various other school health initiatives together was provided. Furthermore, a variety of partnerships were developed with other departments within the district and with outside agencies such as public health departments and universities.

Stakeholder involvement, although required for developing the LWP, was equally important for the policy implementation and sustainability. Since the development of the LWP, stakeholder involvement has waned, with a loss of momentum for implementation. In particular, parent and community involvement has not been sustained. Clear roles for stakeholder involvement in implementation and evaluation need to be identified and articulated, especially for community partners and parents. Identifying local-level champions will also keep the momentum going during implementation. For example, in some districts school-level champions (principals, teachers, and parents) played a key role by advocating for the LWP.

District-level coordination of LWP activities is beneficial for implementing the policy. LWP coordinators fostered positive relationships between district and school personnel. Their presence in schools also served to garner support for the policy, facilitate coordination of activities, and foster accurate communication about the policy to a variety of stakeholders.

Communication about the policy with the broader community is critical. In many districts, fear regarding the implementation of the LWP resulted from a lack of clear and consistent messages about it. Among school personnel, there was also fear regarding the loss of revenue due to vending changes. To an extent, teachers and principals believed that many parents were still unclear about what types of foods could be brought into schools. Plans for communicating with all stakeholders about the LWP need to be developed and implemented by school districts.

Several districts and schools benefitted from having a dedicated budget to support the implementation of their LWP. School districts require resources to fully implement the policy. In particular, financial support is needed for additional teachers, teacher training, and to cover increased costs related to offering healthier food items. Funding is also needed for in-service trainings on nutrition education and physical education among teachers. Many schools are struggling with implementing nutrition guidelines for fundraising and classroom foods. Schools lack sufficient resources to adequately implement healthy or nonfood item alternatives for fundraising. As a first

step, school districts should strategically identify resources that can be used to facilitate the implementation of various components of the policy.

Districts and schools also need support from States in setting standards for health education and physical education. Without State standards on physical education, for example, students will not receive the amount and quality of physical education that is nationally recommended.

Although progress has been made in the implementation of LWPs, much of the work has occurred at the elementary school level. Districts described their target audience as being all grade levels; however, it is apparent that only certain aspects of the policy were reaching the entire student population. For example, in one school district the target audience had primarily been the elementary school level where more opportunities for nutrition education and physical activity had been provided. Standardized testing and accountability for academic subjects other than health and physical education have limited what schools make a priority at the secondary school level. Districts and schools should identify resources to assist with implementing nutrition education and physical activity goals, such as theory-based nutrition education curricula, resources to promote movement in the classroom, and standards-based physical education.

Districts and schools should consider using a systematic approach to implementing LWPs, such as the coordinated school health program. When the strengths and challenges of implementing the LWP are examined, they are consistent with the essential components of a coordinated school health program (coalitions, parent involvement, staff promotion, nutrition services, and physical education). Using the coordinated school health program model can help to address and coordinate the implementation of the LWP, while reducing the barriers to policy implementation.

Monitoring and evaluating the LWP is essential to determining how the policy is being used in schools. Many districts were not systematically monitoring their LWP. Without process evaluation data, it is difficult to get a clear picture of which schools are complying with all aspects of the policy and to identify areas in need of improvement. Districts need formal evaluation plans that clearly outline who will conduct the evaluation, what will be evaluated, what data sources will be used for the evaluation, how the evaluation will be conducted, and when the evaluation will occur. District school health advisory councils may need to use partnerships to take a more active role in monitoring and evaluating their LWPs.

VIII. CONCLUSION

The 2004 Child Nutrition and WIC Reauthorization Act has provided a strong platform for school health. Because most school districts across the nation are required by law to adopt LWPs, the importance and value of school health programs has been raised. LWPs serve as a catalyst, opportunity, and framework for needed change in schools to improve health. Many State agencies and school districts have recognized the need to improve their students' health by encouraging healthy eating and physical activity.

Among the six participating school districts, there have been a number of notable successes in implementing the policy. To date, LWPs have most influenced the nutrition environment through the availability of foods and beverages that meet nutritional standards to students at school. Other successes include improved quality of foods served to students, the availability of daily recess at the elementary school level, and increased support and promotion of employee wellness. Less progress has been made in the provision of nutrition education and in improving the physical activity behaviors of students.

Full implementation of the LWP is feasible, but not without accountability, State support, and funding. Without accountability, districts are not motivated to evaluate. A current barrier to monitoring and evaluation is weak policy language with no accountability mechanisms, no implementation checks, and no reporting. In addition, State support through adopting standards for health education and physical education, and the provision of technical assistance and necessary funding will give schools the tools needed to make nutrition and physical activity a priority.

This project has provided a unique opportunity to get a baseline understanding of school needs and to see what can actually be accomplished to promote health in schools through LWPs. Of the six LWPs that received an evaluability assessment, four have been deemed ready for evaluation. This is an exciting opportunity for us to begin to assess the impact of local wellness policies and look at the implications of this policy on school health.

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TABLE 1 DISTRICT CHARACTERISTICS

SCHOOL DISTRICT	Number of schools	STUDENT ENROLLMENT	RACE/ETHNICITY	RURAL OR URBAN	FREE/REDUCED PRICE LUNCH RATE	PLAUSIBILITY	FEASIBILITY	POTENTIAL IMPACT
A	10	2,600	White (84%) Black (<1.0%) Hispanic (11%) Asian/Pacific Islander (<1.0%) American Indian/Alaskan Native (<1.0%) Other (2%)	Rural	17%	It is plausible that nutrition knowledge will be increased.	Full implementation is supported by current infrastructure and could be enhanced with additional resources and school-based teams.	Potential impact is strongest at the elementary and middle school levels.
В	10	6,500	Hispanic (25%)	Rural	50%	It is plausible that desired outcomes will be achieved (to improve nutrition offerings and increase physical activity).	Feasibility could be enhanced by strengthening the district team and by increasing staff and resources for nutrition and physical education.	Potential impact is strongest at the elementary level and could be increased using a comprehensive community approach.
С	38	11,601	White (84%) Black (2%) Hispanic (6%) Other (2%)	Urban	33%	Plausibility is enhanced by the district's strong leadership and support, and development of tailored goals and objectives.	Feasibility is enhanced by the phased implementation of the policy and the dedicated funding.	There is the potential for significantly impacting the school environment; however, the extent of the impact would vary given the resources at individual schools.

SCHOOL DISTRICT	NUMBER OF SCHOOLS	STUDENT ENROLLMENT	RACE/ETHNICITY	RURAL OR URBAN	FREE/REDUCED PRICE LUNCH RATE	PLAUSIBILITY	FEASIBILITY	POTENTIAL IMPACT
D	20	14,000	White (31%) Black (24%) Hispanic (45%) American Indian (1%)	Urban	65%	Plausibility is increased by the use of evidence- based programs.	Feasibility is enhanced by the district's positive leadership and the conduct of yearly assessments.	The potential impact on the nutrition and physical activity environment is favorable.
E	35	23,000	White (25.6%) Black (2.4%) Hispanic (70.2%) Asian (1.0%) American Indian (0.8%)	Urban	53%	The use of scientifically sound nutritional programs increases plausibility.	Feasibility is strong for current programs.	Overall impact could be improved with the expansion of nutrition programs to upper grade levels and stronger physical education regulations.
F	66	41,444	White (26%) Black (30%) Hispanic (13%) American Indian (2%)	Urban	69%	Policy is guided by sound theoretical models. Plausibility is enhanced by a focus on the environment and cultural tailoring.	Feasibility is favorable due to central control of various components (e.g., nutrition services and vending).	Potential impact on nutrition (e.g. foods consumed by students) is high.

APPENDIX A

LOCAL WELLNESS POLICY CRITERIA: CHECKLIST

Local Wellness Policy (LWP) Checklist

The LWP Checklist will be used to rank order local wellness policies, such that policies with higher scores will move on to be reviewed by the expert panel. Each criterion will receive a maximum score of 1 point (1 point if criterion is addressed in the policy or 0 points if the criterion is not addressed in the policy).

Sto	ıte:	District	Contact Name:	
School District:		Contact	Information:	
		 dressed Policy	Not Addressed in Policy	Note
Ž	trition Education			
	Nutrition education offered at all grade levels in the school.			
	Topics of nutrition education curriculum (i.e., using food labels, MyPyramid, accepting body size differences). 1,2			
	Nutrition education instruction by specific teacher type (i.e., classroom teacher, health teacher, school nurse).1			
	Nutrition education as part of other classes in addition to health education. ¹			
	Mention of specific number of contact hours for nutrition education. ¹			
	Nutrition education training for teachers and other staff. ^{1,2}			
	Other:			

Local Wellness Policy (LWP) Checklist (cont.)						
	Addressed in Policy	Not Addressed in Policy	Note			
Nutrition Guidelines	<u>'</u>					
Meals served through the National School Lunch and Breakfast Programs meet, at a minimum, nutrition requirements established by USDA, State, or district policies.						
Agreements with food or vending companies to sell foods or beverages in schools shall ensure that contractors follow the district's nutritional standards. ¹						
Food and beverages sold in cafeterias, vending machines, and school stores meet district's nutrition standards. ^{1,2}						
Cut-off points for permissible foods sold individually (i.e., total grams of fat, percentage of total calories from fat, total grams of added sugars). ¹						
Restrictions on vending machines themselves, hours of operation, or location. ¹						
Restrictions or suggestions for fundraising. ^{1,2}						
Foods and beverages sold at school-sponsored events outside of the school day meet nutrition standards. ¹						
Other:						

Local Wellness Policy (LWP) Checklist (cont.)						
Addressed Not Addressed in Policy in Policy Note						
Nutrition Environment						
Surroundings for eating (i.e., placement of healthier options on lunch lines, promotion of healthy nutrition choices in the physical setting where kids eat).						
Mealtimes and scheduling. ^{1,2}						
Strategy for persons eligible for free and reduced-price meals.						
Qualifications of school food service staff.1						
Provide continuing professional development for nutrition professionals. ¹						
Professional development for food service staff. ¹						
Prohibits use of food as a reward. ¹						
Prohibits withholding food as punishment. ¹						
Other:						

Local Wellness Policy (LWP) Checklist (cont.)						
Addressed Not Addressed in Policy in Policy Note						
Physical Education/Physical Activity	У					
Curriculum is based upon national or State physical education standards. Physical education is offered daily						
(i.e., 150 minutes per week for elementary; 225 for secondary).						
Integration of physical activity into regular classrooms by teaching subjects through physical activity/movement.						
Integration of physical activity into regular classrooms by having physical activity breaks.						
Physical education instructor must be certified, licensed, or endorsed. ¹						
Will not allow substitution (i.e., participation in band, chorus, ROTC) for meeting the physical education requirement.						
Engages students in moderate to vigorous activity during at least 50% of physical education class time. ¹						
Daily recess requirements for elementary school students. ¹						
Physical activity opportunities available before and after school (i.e., safe routes to school).1						
Physical activity will not be used as punishment (i.e., making students do laps, do push-ups, etc.) for bad behavior in any classroom.						
Physical activity will not be withheld as a punishment. ¹						
Other:						

Local Wellness Policy (LWP) Checklist (cont.)					
	Addressed in Policy	Not Addressed in Policy	Note		
Other School-Based Activities That	Promote Stud	lent Wellness			
Marketing of food and/or beverages. ³					
Access to physical activity facilities. ³					
After-school programs. ³					
Coordinated school health approach.3					
School health councils. ³					
Community/family involvement.3					
Staff wellness. ³					
Counseling, psychological, and social health services. ³					
Health services. ³					
Other:					
Monitoring					
Person identified who will review policy to ensure compliance.1					
Plan developed to review policy compliance, assess progress, and determine areas in need of improvement. ¹					
Other:					
District Questions	Yes	No	Note		
Policy includes all required components of the local wellness policy?					
Policy has been adopted by the school district?					
Policy was implemented in multiple district schools during 2006-2007?					
Can these schools be identified?					
Is the district monitoring implementation of, and adherence to, the policy?					
District size.					
Number of schools implementing LWP.					
Source: ¹ Schwartz, M.B. (n.d.). <i>Macro-level pred</i>	dictors of school wel	lness policies in Connecticu	t. Rudd Center for Food Policy		

Source: ¹Schwartz, M.B. (n.d.). *Macro-level predictors of school wellness policies in Connecticut*. Rudd Center for Food Policy and Obesity at Yale University.

² California Project LEAN. (2006, October). *Policy in action: A guide to implementing your local school wellness policy* [www.CaliforniaProjectLean.org]. Sacramento, CA: Author.

³ Action for Healthy Kids. (n.d.). Wellness Policy Fundamentals.

APPENDIX B SELECTION CRITERIA: DESCRIPTIONS

SELECTION CRITERIA: DESCRIPTIONS

Potential Impact. The intervention appears to have potential for impact on the social or physical environment pertinent to healthy eating and active living—and ultimately on the target individual behaviors. 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. Intervention is new or different or a significant variation on an existing promising intervention. Emphasis on innovativeness may be mitigated if the intervention represents a type or category of intervention that is prevalent in the field and/or of particular interest to the Foundation 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, grassroots groups, and so forth.

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 extent to which 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 C 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, wellness promotion
- Support from the school district and community organizations
- Administrator's role and responsibilities
- Profile of community and/or 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
- Evaluation plan
- Data collection of outcomes and data sources
- Financial resources, funding challenges, future funding mechanisms
- Startup costs, ratio of costs across policy components, cost of administration

Principals

- Principal's role in developing and implementing the policy
- Policy's goals, expected outcomes, activities, and services regarding nutrition, physical activity, 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/or 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, 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, wellness promotion
- Challenges and barriers of implementing policy
- Other key staff
- Profile of community and/or 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

- Partner's involvement, role, and responsibilities in developing and implementing the policy
- Policy's goals, expected outcomes, activities, and services regarding nutrition, physical activity, wellness promotion
- Community awareness and involvement
- Challenges of partnership
- Benefits from partnership
- Other potential partners
- Success(es) of the policy
- Key lessons learned from experience with the policy
- Funding sources and their effect on partnership

Evaluators

- Evaluator's role and responsibilities in developing, implementing, and/or evaluating the policy
- Policy's goals, expected outcomes, activities, and services regarding nutrition, physical activity, wellness promotion
- Reach to target audience
- Community awareness, involvement, and reaction

- Other potential partners
- Success(es) of the policy
- Evaluation design
- Data collection activities and methods
- Analysis of data and dissemination of results
- Key lessons learned from experience with policy and efforts with evaluation
- 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, wellness promotion
 - Stakeholder's 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
 - Success(es) of the policy
 - Key lessons learned from experience with the policy
 - Knowledge of policy's funding

APPENDIX D LOCAL WELLNESS POLICY LOGIC MODEL

LOCAL WELLNESS POLICY LOGIC MODEL

Problem Statement

A healthy diet and increased physical activity contribute to obesity prevention. Schools play a critical role in preventing childhood obesity.

INPUTS

District Staff

Food Service Superintendent

Wellness Committee

School Staff

Parents

Community Partners Students

Policy

Local Wellness Policy

Resources

Nutrition Curriculum PE Curriculum **Nutrition Guidelines** Physical Activity Guideline

ACTIVITIES

District Policies & Support

Professional Development

Provide staff nutrition ED training Conduct in-services with school principals

Resources & Dissemination

Develop policy overview brochure Develop annual wellness policy assessment tool

Disseminate policy overview brochure to parents

Disseminate assessment tool to school principals

Monitoring

Collect completed annual wellness policy assessments from each school

School Practices & Environment

Health Education

Nutrition education integrated into curriculum

PE classes emphasize moderate to vigorous physical activity

Nutrition

Offering fruits and vegetables

Offering only healthy beverages in elementary school

Healthier onsite preparation of

Contract negotiations

Physical Activity

Scheduling recess before lunch

Staff Wellness

Wellness promoted through electronic messaging

OUTPUTS

District Policies & Support

Number of in-service trainings conducted at all schools at the beginning of the school year Percent of parents (all) provided with information on the local wellness policy

Percent of school principals (all) trained on policy components and implementation practices

School Practices & Environment

Percent of core subjects (all) for which nutrition education topics are identified

At least 85% of all PE class time dedicated to moderate to vigorous physical activity

Number of points of service (all) offering fruits and vegetables daily

Percent of elementary schools (all) offering only milk, unflavored water, and 100% fruit juice

Percent of middle schools (all) eliminating frying onsite in middle schools

Percent of contracts that prohibit the sale of sugared, carbonated beverages in containers larger than 12 ounces

Percent of elementary schools scheduling recess before lunch

SHORT-TERM **OUTCOMES** $(\sim 1 - 3 \text{ years})$

District Policies & Support

Full implementation of LWP Increased nutrition education knowledge for all health instructors By the 2006–2007 school year all principals will understand the policy, its components, and the implementation strategies

Principals are implementing recommended practices All staff understand the policy

knowledge among students Increased opportunity for moderate to vigorous physical activity

Increased availability of healthy beverage options in elementary

Increased number of healthy or non-food raising alternatives

Increased parent and community involvement

INTERMEDIATE OUTCOMES $(\sim 3 - 5 \text{ years})$

Increased consumption of more healthy foods and beverages Increased physical activity among students Increased physical activity among staff

LONG-TERM **OUTCOMES** $(\sim 4 - 6 \text{ years})$

Reduce proportion of obese and overweight students as measured by body mass index Students make healthy food choices as part of lifelong change Students incorporate

physical activity as part

of lifelong change

Goal

Contribute to improving the eating habits and physical activity of schoolaged youth.

School Practices & Environment

Increased nutrition education Increased availability of fruits and vegetables

school

Pre- and post-training assessment School Health Policies and Programs Survey

Data source to document accomplishment

Training sign-in sheets, assessment tool, cafeteria order forms, School Improvement Plan, lesson plans, copies of contracts

Contextual Factors

Leadership; Socioeconomic status; School culture