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Barriers to development and implementation of school district nutrition and wellness policies in San Bernardino County, California

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BARRIERS TO DEVELOPMENT AND IMPLEMENTATION OF SCHOOL
DISTRICT NUTRITION AND WELLNESS POLICIES IN
SAN BERNARDINO COUNTY, CALIFORNIA

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education:
Health Education

by
Mary-Jean Paula Stevenson
June 2007
BARRIERS TO DEVELOPMENT AND IMPLEMENTATION OF SCHOOL DISTRICT NUTRITION AND WELLNESS POLICIES IN SAN BERNARDINO COUNTY, CALIFORNIA

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Mary-Jean Paula Stevenson
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ABSTRACT

This descriptive study examines the degree to which school districts have been able to respond to the federal amendment of the Richard B. Russell National School Lunch Act of 1996. This amendment requires every school district to develop and implement a local nutrition and wellness policy for students, faculty, and food service staff.

The primary research question to be answered from this study was: To what degree have school districts in the County of San Bernardino been able to respond to federal legislation mandating the design and implementation of local school wellness policies?

A survey was used to study perceptions of respondents on each district's Nutrition and Wellness Advisory Committee, and the district's progress toward devising and implementing wellness program policies. There were nine questions, both forced-choice and open-ended questions.

Written surveys were distributed via e-mail to 33 school districts, of which 16 districts responded. With several follow-up reminders by telephone and e-mail, this constitutes a 48% response rate. In addition, an interview was conducted with the School Health Consultant from the San Bernardino County Superintendent of Schools Office regarding her perceptions of the difficulties experienced
in six small districts with which she worked to devise nutrition and wellness policies.

Quantitative data were entered into an SPSS database for analysis; comments were examined for content. A major finding was that the majority of districts have not yet implemented Nutrition and Wellness policies. Several respondents felt overwhelmed with required policy changes due to time restrictions and lack of a well qualified individual to coordinate and monitor. Smaller districts' respondents complained of the lack of funding and support.

Considering these findings, recommendations are to establish quarterly meetings with the County Superintendent of Schools' representative, to discuss and monitor effective changes, to provide grade-level guidance and resources for nutrition education content, and to create in each district a position for a qualified District Prevention Coordinator position to monitor and evaluate policy implementation.
ACKNOWLEDGMENTS

I would like to extend my sincere gratitude to my research advisors Dr. Clark, Dr. Chen-Maynard, and Dr. Coleman. Their expertise, dedication, mentoring, advice, and encouraging words toward this project were invaluable to me in completing my thesis.

I would like to express my deepest thanks to my husband, Jaime Almodovar, and my friend, Suzan Rhoades. Their love, patience, understanding, and unwavering support are the essential factors and foundation of my life.
DEDICATION

I would like to dedicate this thesis to my mother, Gloria J. Pennelli (in her memory), with special gratitude for her love and guidance throughout the years.
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CHAPTER ONE
INTRODUCTION

Headlines across the nation proclaim the news that classroom teachers have seen with their own eyes over the past two decades: children in the United States are getting fatter. Wechsler and colleagues (2004) described the negative consequences of this trend on the physical health and self-esteem of the nation’s young people, as well as the financial burden the obesity epidemic is placing on American’s healthcare system.

Statistical data from the National Health and Nutritional Examination Survey (NHANES) conducted by the Centers of Disease Control (CDC) showed that 17.1 percent of children and adolescents ages two to 19 years are overweight (CHHCS, 2005). In California, several sources of data describe the prevalence of overweight among children and adolescents. It was reported by the Pediatric Nutrition Surveillance 2003 report, among children less than five years old, 17.6 percent of children in California were overweight compared to 14.7 percent of children nationwide (CCPHA, 2005).

In recent years, several weight-related conditions that were observed primarily among adults have been
diagnosed increasingly in younger people. For example, ten years ago type 2 diabetes was almost unknown among young people, but in some communities it now accounts for nearly 50 percent of new cases of diabetes among children or adolescents (Rosenbloom, 1999).

NHANES data show that from 1960 through 2003, the prevalence of overweight children has increased, with long-term implications for chronic diseases as type 2 diabetes, heart disease, high blood pressure, and stroke, as well as social stigma and depression (California Department of Education, 2006). Poor diets and inadequate physical activity are contributing to premature deaths across the United States (Flegal, 2005).

In 2002, the California Center for Public Health Advocacy (CCPHA) released a study reporting that 26.5 out of every 100 children enrolled in grades 5, 7, and 9 in the state of California in 2001 were overweight. The National Center for Health Statistics (NCHS) defines overweight in children and adolescents as at or above the 95th percentile for the gender-specific Body Mass Index for age growth charts.

In an updated study, CCPHA (2005) reported that in 2004, childhood overweight rates had increased by six percent, to 28 out of 100 children. Between 2001 and 2004,
the percentage of overweight children increased among all demographic groups regardless of gender, grade level, or racial/ethnic group.

The growing levels of childhood overweight point to two of the most serious public health crises facing California today: unhealthy diets and low levels of physical activity (CCPHA, 2005). Unless steps are taken to improve children's diets and to increase their levels of physical activity, the nation’s children will face a lifetime of health problems, shortened life spans, and high healthcare costs (CCPHA, 2005).

Problem Statement

The urgency of adopting a comprehensive approach to improving student health has been increased by a recent requirement under Section 203 of the Federal Child Nutrition and Woman, Infant, and Children (WIC) Reauthorization Act of 2004. The Act requires every school district participating in federally subsidized school breakfast and lunch programs to develop and implement a local Nutrition and Wellness Policy by the start of the 2006-2007 school year. The policies are to be developed by a diverse group of school administrators and food service directors. School districts that fail to implement the
program successfully will lose their federal school lunch
program funding (School Nutrition Association, 2005).

Even though schools alone cannot meet all the
nutrition and physical-activity-related needs of students, they can make an impact since the relationship among
health, nutrition, physical activity, and learning is so inter-related. The fact remains, young people spend so
much time at school or at school-related activities, schools can be a vital part of the solution to and
prevention of obesity (CDC, 2001). One of the nation’s leading school health professionals stated that “however
well intended, the burden of developing and implementing
such policies and practices (with no additional funding)
may be beyond the capacity or interests of many school
districts” (K.R. Clark, personal communication, October 15, 2006).

Purpose of the Project

This thesis explored the major barriers to the
development and implementation of these policies and
identified areas of resistance to change in each district surveyed. The surveyed participants gave insights into
whether this policy could be successfully implemented.
Although the federal government is to be praised for its efforts, school districts may face barriers to successfully devising and implementing nutrition and wellness policies. The difficulties may be due to a variety of factors, such as a lack of qualified staff to devise, implement, and oversee policy changes, or external pressures related to foods and beverages sold outside of the district's meal programs, i.e., vending machines, food purchased outside of the school, school stores, and school fundraisers.

Research Questions

The main research questions to be answered from this study were as follows:

1) To what degree have school districts in San Bernardino County been able to respond to federal legislation mandating the formulation and implementation of local school nutrition and wellness policies?

2) To what extent do respondents perceive any barriers to implementing the policy?

A survey of 33 school districts was implemented to gather information regarding the development of wellness policies, including each respondent's role at the school
site or as a member of the required advisory committee. The survey elicited information in all the areas of concern: nutrition services on campus, nutrition education, physical education, and nutrition and wellness activities on campus. Respondents were also questioned about how schools would monitor and enforce the new policy. In addition, the survey included questions about how well the committee functioned while it was formulating the policy. Respondents' comments regarding their particular sites were elicited regarding the federal legislation that required this policy to be created and implemented. In addition, an interview was conducted with the School Health Consultant from the San Bernardino County Superintendent of Schools Office regarding her perceptions of the difficulties experience in six small districts with which she worked to devise their nutrition and wellness policies.

Assumptions

The following assumptions were made regarding this research:

1) The respondents would answer honestly and without duress.
2) There was no prior history of nutrition and wellness policy development in participating districts.

3) There was a relationship between the level of deliberation, concern, and accuracy in the committee’s work, resulting nutrition and wellness policies, and ease of implementation.

Limitations and Delimitations

The following limitations applied to the project:

1) Study participants were limited to public school districts within the County of San Bernardino, California.

2) Private schools were not included because they were not affected by the new legislation.

3) Only one representative from each district was surveyed.

4) Due to the small size of many school districts and lack of full-time personnel, secondary data on these districts were actually reported by the San Bernardino County Superintendent of Schools’ representative assigned to assist the districts with policy development.
5) A history of prior health-related policy activity or committee work in each district may have had an impact on the district’s ability to respond to this policy initiative.

The following delimitations applied to this project:

1) Histories of collaborative policy development of school districts as well as demographics of committee members, including gender, ethnicity, age, or socio-economic status, were excluded from the analysis.

2) The extent to which district personnel participated in the County of San Bernardino policy workshops or scheduled meetings was not included in the analysis.

Definitions of Terms

A la Carte: Foods sold individually and not as part of complete National School Lunch Program (NSLP) meal. A-la-carte items are exempt from dietary guidelines to which NSLP meals must adhere.

Barriers: Challenges and/or issues with which a school district may be confronted in the formulation and implementation of a nutrition and wellness policy.
**Body Mass Index (BMI):** A ratio of children’s heights and weights plotted for age and gender, and compared against historic population references. Children are defined as overweight with a BMI for age at or above the 95th percentile of the Centers for Disease Control Growth Charts, and are considered at risk if they are between the 85th and 95th percentiles (CSBA, 2005).

**Competitive Foods:** United States Department of Agriculture (USDA) defines “competitive foods” as foods offered at school other than meals served through USDA’s school meal programs, which include school lunch, school breakfast, and after-school snack programs. These include both foods of minimal nutritional value (FMNV), and all other foods offered for individual sale (ranging from second servings of foods that are a part of the reimbursable school meal, to foods students purchase in addition to or in place of a reimbursable school meal, such as à-la-carte sales and other foods and beverages purchased from vending machines, school stores, and snack bars).

**Food Service:** The department within the school district or school that provides the school breakfast and/or
lunch program, including operation of the National School Lunch Program.

**National School Lunch Program** (NSLP): The program administered by the United States Department of Agriculture (USDA), in cooperation with state and local education agencies, which subsidizes the cost of meals for children of low-income families by preparing and serving meals at participating schools. The NSLP assures that breakfast and lunches are available to all students at participating schools and those meals meet specific nutritional requirements.

**Nutrient Density:** The nutritional composition of foods expressed in terms of nutrient quality per 1000 kcal. If the quality of nutrients per 1000 kcal is great enough, then the nutrient needs of a person will be met when his or her energy needs are met.

**Nutrition Education:** A planned, sequential K-12 curriculum that focuses on selecting foods that are high in nutrients, developing healthful eating habits, eating the recommended number of servings from the Food Guide Pyramid, following U.S. Dietary Guidelines, choosing a healthful diet that reduces the risk of disease, learning how to read food labels, developing
healthful eating habits, protecting against food-borne illnesses, and maintaining a desirable body weight and healthy body composition.

**Obesity**: An excessive accumulation of body fat.

**Overweight**: The condition having excess body weight for one’s height. It is defined as a body mass index of 25 to 30 kg/m². Body weight in excess of a particular standard and sometimes used as an index of obesity.

**Physical Education**: A planned, sequential K-12 curriculum that provides cognitive content and learning experiences in a variety of activity areas including basic movement skills; physical fitness; rhythms and dance; games; team, dual, and individual sports; tumbling and gymnastics; and aquatics.

**Program Monitoring and Evaluation**: The process that ensures accountability for implementation and evaluation of the districts’ wellness policies. It is essential to identify desired outcomes that can be clearly measured. Each district needs to schedule periodic reports to the school board about its progress.
CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

In the United States, the 21\textsuperscript{st} century brought with it high-speed technology and extended work hours. The average commuter on the way to work or play observes an inordinate number of billboards that entice the driver to purchase convenient foods and beverages that will not interrupt this fast pace life. While such foods are indeed fast and convenient, they also tend to be high in fat, salt, refined carbohydrates, energy contents and low in nutrient density. This is one of the many contributing factors that have led to the current trend of increasing rate of obesity in all Americans (Gardiner, 2004).

In the last 20 years, there has been a dramatic increase in obesity in the United States. The latest data from the National Center for Health Statistics (NCHS) show that 30 percent of adults (over 60 million) in the United States over 20 years of age are obese (CDC, 2005). This problem is not limited to adults, since the number of children and teens ages six to 19 years (over nine million) who are overweight has more than tripled since 1980. Sixteen percent are considered overweight, while an
additional 15-20% of teenagers are at risk of becoming overweight (Neumark-Sztainer, 2005). These increasing rates of obesity in children raise concern because of potential rise in chronic diseases which has implications for burdening America’s healthcare system and affecting quality of life. Being overweight or obese increases the risk for many chronic diseases and health conditions, including high blood pressure, diabetes, and coronary heart disease.

Obesity is a multifactorial condition (Neumark-Sztainer, 2005). There are many factors leading to obesity and eating disorders, including personal behaviors, family and cultural practices, broader social norms, and public policies. Children typically function within families and peer groups that operate within institutions such as schools and work sites, which are located within communities that affect their food choices and habits. A multi-level description, inspired by a model created by Dr. Urie Bronfenbrenner (Neumark-Sztainer, 2005), illustrates the factors effecting weight-related issues as a series of concentric circles, each representing a sphere of influence:

- Individual characteristics, such as eating behaviors, personality, and genetics;
• Family factors, such as verbalizing weight concern conversations at home, and family meal patterns;

• Peer influences, such as dieting norms and participation in sports during and after school activities;

• School and other institutional factors, such as policies against weight teasing within schools and school lunch food;

• Community factors, such as opportunities for teens to become involved in different activities and community safety; and

• Societal factors, such as media influences and gender role expectations.

The most current estimates of increasing obesity are based on the National Health and Nutrition Examination Survey (NHANES), a project of the National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention (CDC), comparing the data collected from NHANES I, NHANES II, and NHANES III surveys from 1960 until 2002. These data (based on BMI) indicate that 15.8 percent of children ages six to 11 years and 16.1 percent
of adolescents ages 12 to 19 years are overweight (Flegal, 2005).

A major concern regarding childhood obesity is that obese children tend to become obese adults (Hill, 1998). The cost of obesity to the American healthcare system was estimated to be $69 billion in 1990 (approximately 8% of the nation's total healthcare costs), and will likely increase as the population ages and the prevalence of obesity grows (Hill, 1998).

Studies Related to Obesity in Youth

California's initial awareness of this growing problem led to the development of the California Children's Healthy Eating and Exercise Practices Survey (CalCHEEPS), which was a survey funded by the California Endowment examining 814 children ages nine to 11 years, and it was implemented from April through June 1999 (Fleishman-Hillard, 1999). In response to the findings of this survey, changes were recommended for the school meal program, nutrition education, vending machine selections, and physical education.

In 2003, a similar large-scale survey reported the effectiveness of a school-based obesity prevention program in Nova Scotia, Canada, entitled the "Children's Lifestyle
and School-Performance Study" (CLASS). The results of this study showed that students from the Healthy Schools Eating Programs, a cohort group in the study receiving nutrition and fitness programs, had lower rates of obesity and overweight trends and healthier eating habits as compared to the general student population (Veugelers, 2005).

The position of the American Dietetics Association (ADA), which is supported by the Society for Nutrition Education and the American School Food Service Association, is that a comprehensive nutrition program must be an integrated effort including an effective education in food and nutrition. Any school environment that provides opportunity for healthy choices and physical activity, and the involvement of family members and the community, will promote nutrition education to everyone (ADA, 1995). Nutritional screening, counseling, and referrals for nutritional problems should be integral parts of school health services.

French (2001) conducted a study on pricing and promotion strategies such as purchases of low-fat snacks from vending machines. Low-fat snacks were added to 55 vending machines at 12 secondary schools, and four pricing levels were applied (equal price, 10% reduction, 25% reduction, 50% reduction). The results showed that labels
and signs promoting low-fat snack choices had a small but positive significant effect on the purchase of low-fat snacks. However, subjects were still confused about public health messages (French, 2001). The major finding was that lowered price of low-fat items in vending machines had a greater impact on purchasing behavior than did public health messages.

Another study by Neumark-Sztainer (1997) examined recommendations for overweight youth on the development of a school-based weight-control program. The researchers interviewed 61 overweight adolescents to evaluate their interest in a school-based weight-control program. The results from this study indicated that overweight adolescents were willing to participate in a school-based weight-control program if (1) it was conducted in a supportive manner; (2) it offered enjoyable activities; (3) it was sensitive to the needs of overweight youth; and (4) it did not interfere with other activities. The other important ingredient was a program leader who understood the difficulties that overweight youth experience. Many expressed their preference for a leader who was currently overweight or had been overweight in the past (Neumark-Sztainer, 1997).
Seven years later, the same researcher conducted one of the largest and most comprehensive research studies to examine factors associated with eating patterns and weight-related issues in adolescents. Dr. Neumark-Sztainer named it “Project EAT” (Eating Among Teens). In her book entitled “I’m, Like, So Fat!” 4,746 adolescents from diverse socioeconomic backgrounds were interviewed about key issues, such as factors that influence their food choices, family meals, what it feels like growing up overweight in a thin-oriented society, and how their parents could help them adopt healthier behaviors that makes them feel good about themselves.

Based on what was learned from teens in these studies, she and her colleagues developed and evaluated programs such as “Very Important Kids” for elementary school girls and boys, “Free to Be Me” for preteen Girl Scouts, “The Weigh to Eat” for high school girls and boys, and “New Moves” for high school girls.

These interventions promoted self-esteem, prevented teasing, enhanced media literacy skills, encouraged healthy eating, and made physical activity fun. The lessons learned can be applied in homes or schools (Neumark-Szainer, 2005).
Case Studies

Several school districts in the state of California have already improved their quality of meals offered in school. Students' opinions toward school food service are beginning to change. For example, the Alisal Union School District of Monterey County introduced salad bars in all eleven of its schools. Before each salad bar is rolled out, food service staff members first attend a teachers' meeting to explain the nutritional basis for the salad bar and how teachers can help students eat well. Next, food service staff members go to every classroom to discuss salad bar etiquette (California Food Policy Advocates, 2002).

Another successful example is the Carlsbad Unified School District in San Diego County. The food service no longer sells candy or soda at either of the two district high schools. The school district is fully aware of providing nutritious foods to students and provides mid-morning snacks of sunflower kernels, string cheese, and bottled water. The snack is a reimbursable breakfast for children who did not get breakfast before school (California Food Policy Advocates, 2002).

A third innovative idea at the Paso Robles Joint Unified School District was a mini farmers' market, salad
bars, and entrée bars that emphasized whole foods and created revenue with an increase of 5-10% each year. This district also has a Culinary Arts Academy that teaches high school students how to cook healthy in a restaurant-level two-year program (California Food Policy Advocates, 2002).

Policy Development Issues

A variety of factors can influence food services in a school district. The three areas of consideration in this research are (1) competitive food policies, (2) public policy, and (3) federal government mandated policies with guidelines for implementation in each school district.

Competitive food policies have allowed external vendors on campus to sell food items that are high in caloric value. In the school nutrition environment, competitive foods are viewed as an important modifiable factor when considering the rising rates of childhood obesity.

In October through November of 2004, school districts from 51 districts with the largest enrollment (5.9 million students) in each state and the District of Columbia were included in a comparative study. Representatives of the districts' nutrition services were interviewed about each
school district’s nutrition policies on “competitive foods” and the financial impact of limiting these types of foods with healthy vending options. Researchers found that substantial changes to nutrition policies and foods offered at school had occurred by 2004-2005 when the districts sought to influence the type and quantity of competitive foods and beverages available by setting specific limits on content and portions. Another change that occurred was offering more fresh fruits and vegetables and eliminating chips, fried foods, and sodas (Greves, 2006).

Nineteen of the 51 districts (39%) had competitive food policies beyond state or federal requirements. The majority of these district policies (79%) were adopted since 2002. Ten districts (53%) set different standards by grade level, and 63% prohibited any sale of soda in all of its schools. Fewer policies (53%) restricted portion size of food. Restrictions more often applied to vending machines (95%). In addition, few policies addressed monitoring (32%) or consequences for non-compliance (11%) (Greves, 2006).

The major obstacle among school districts in adopting a competitive foods policy was limiting the sale of sodas. Several school districts with a district-wide vendor
contract cited resistance from individual principals. Beyond financial constraints, respondents identified several additional barriers to adopting and implementing a competitive food policy. Respondents from nutrition services in some districts described their struggle to find support among administrators or school board members to champion the cause of improving nutrition. Another barrier in some districts were parents and children who revisited changes to the schools' food and drink options, wanting to protect students' "free will" in choosing what they ate, even if it was unhealthy (Greves, 2006).

Public policy finally is catching up with the experts who have warned for years that children's diets consisted of too little food with greater nutritional value. California state law now requires that the schools, where more than six million youngsters attend classes each school day, be a safe haven where students eat healthy and consume life-nurturing meals. Students are to learn how to minimize and avoid consumption of low nutrient foods and acknowledge the difference between high nutrient foods and low nutrient foods (California Food Policy Advocates, 2002).

Many school districts throughout the state may already have a number of policies in place that are
related to student health, nutrition, and physical activity. These policies may or may not have been developed in a comprehensive manner based on relevant research and making the needs of children and youth a priority.

On June 30, 2004, President George W. Bush signed the Child Nutrition and WIC Reauthorization of 2004, into law. This law required every school district to develop and implement a local wellness policy by fall of the 2006-2007 school year. As an amendment to the Richard B. Russell National School Lunch Act or the Child Nutrition Act of 1966, the 2004 law required that all school districts throughout the United States establish a local nutrition and wellness policy for schools, which at a minimum:

1) Establishes goals for nutrition education, physical activity, and other school-based activities designed to promote student wellness in a manner that the local educational agency determines appropriate;

2) Includes nutritional guidelines selected by the local education agency for all foods made available on each school campus. School districts must include a program with objectives
for promoting student health and reducing childhood obesity;

3) Provides assurance that guidelines for reimbursable school meals shall not be less restrictive than regulations and guidance issued by the Secretary of Agriculture, pursuant to subsections of the Child Nutrition Act and the Richard B. Russell National School Lunch Act of 1966;

4) Establishes a plan for measuring the implementation of the local wellness policy, including the designation of one or more persons within the local education agency or at each school, as appropriate, charged with operational responsibilities for ensuring that the school meets local nutrition and wellness policy; and

5) Involves parents, students, representatives of the school food authority, the school board, school administrators, and the public in the development and implementation of the school wellness policy (CSBA, 2005).

Although clearly articulated in the law, these required policies could face some difficulty in the implementation phase. In his discussion of organizational
change theory, Hunter (2006) outlined criteria for the successful adoption and implementation of new policies. He suggests that the policy must be:

1) Meaningful. Does this policy have ownership? Does it bring about a sense of enthusiasm and accomplish something of value?

2) Plausible. If followed, will the course of action (services) achieve the desired outcome objectives?

3) Doable. It is realistic, taking into account the organization's capabilities in relation to its environment? Is this something the organization can really do? (Hunter, 2006).

Goodman (1997) states that policies can only be useful if they are designed to serve a clear purpose, and once implemented, the organization adheres to them. For example, if the object is to support the design, implementation, and evaluation of a particular service program (e.g., preventing obesity among teens) a solid theory of change, most likely, will focus narrowly on issues of a target population, outcomes, and program or service elements. But if the purpose is to help organizations build their capacity to deliver programs with reliability and sustainability, it must broaden its
scope to include organizational and financial issues in order to be successful (Goodman, 1997).

In the early stages of implementation of a policy change, there should be several theories of change put into practice. The three legs of a theory of change are a program theory, an organizational theory, and a financial theory, all of which are highly interwoven and mutually dependent. These are intended to (a) support an organization with a growth strategy, (b) maintain program quality while the growth takes place, and (c) strengthen the organization to help it maintain its long-term sustainability (Hunter, 2006).

As applied to implementing the newly required nutrition and wellness policies, the literature above suggests that this might have been best achieved if each school site had formulated a vertically integrated team that included some board members, the executive director, senior and mid-level management (including food service program directors), and instructional staff. Discussions about new nutrition and wellness policies should have been facilitated toward consensus on matters of central concern to the school district, simultaneously including programmatic, organizational, and financial matters. To be successful, newly formed policies should focus on the
environment and mission, goals and objectives, structure, programming, and operations. This is essential in helping board members to realize and understand the challenges the organization will be facing, which include capacities the school district will need to gather and deploy in order to implement those new policies effectively.

The dilemma a school district faces when there is not enough preparation and planning prior to implementation of a new policy could mean failure for the new program to survive. According to the Student Wellness Policy Resource Guide (CSBA, 2005) the school board can act in a positive direction by:

- Setting a vision for good nutrition and good health;
- Acting as advocates for good health and nutrition;
- Adopting policy;
- Adopting nutrition education curriculum;
- Allocating resources to district programs; and
- Ensuring program accountability.

Collectively, the school board must have formulated a plan that met the new legislation by June 30, 2006, with implementation of the new policy beginning July 1, 2006.
Recognizing the benefit and good intention of the federal legislation, it is the purpose of this research study to identify the potential points of difficulties and barriers during the process of formulating and implementing such policies in each school district within the County of San Bernardino.

Summary

In summary, the literature points to the fact that childhood obesity is leading to serious adult medical issues and economic costs all throughout the United States and Canada. Studies over the last twenty years, now supported by state and federal laws, have determined that an integrated approach that involves schools, families, and communities is necessary to solve this problem.

The formulation of a new Nutrition and Wellness Policy in each school district as required by federal law mandates that all school districts across the United States implement the minimum requirements to the amended Richard B. Russell National School Lunch Act. There are five defined areas of this legislation, which pose challenges at program, organizational, and fiscal levels.

It was the purpose of this study to describe the degree to which local school districts have been
successful in implementing new policies. This also
included the identification of barriers to implementation.
CHAPTER THREE

METHODOLOGY

Introduction

A survey-based research study involving 16 school districts throughout San Bernardino County was initiated in the fall of 2006 to examine the status of each district’s newly adopted Nutrition and Wellness Policy. The main research question to be answered from this study was to what degree have school districts been able to respond to the federal legislation mandating the design and implementation of local school nutrition and wellness policies? Also, to what extent does the respondent of the survey perceive any barriers to the implementation of the policy?

Participants

The study enlisted a convenience sample of school district Nutrition and Wellness Advisory Committee members representing 16 out of 33 school districts in the County of San Bernardino, California. The office of County Superintendent of Schools provided a list of district food service personnel and administrators to contact. Seven nutrition staff members out of 16 districts responded to the survey. The other eight responses came from one
director, three superintendents, two health services coordinators, one assistant supervisor, and one administrative assistant (Table 1). Seventeen district respondents’ chose not to participate in this survey by not returning the survey via e-mail.

Instrumentation and Data Collection

A survey was used in this descriptive study to determine perceptions of representatives from Nutrition and Wellness Advisory Committees regarding each district’s progress toward devising and implementing nutrition and wellness programs. The survey was designed and assessed for face validity in collaboration with a faculty member at California State University San Bernardino, the County Schools Food Services Dietitian, and a San Bernardino County Superintendent of Schools representative.

Written surveys were distributed to 33 districts and retrieved via e-mail from 16 respondents. Additional information was gathered from 12 of the 16 respondents via telephone. The participants were given 15 days to respond to the survey. A reminder followed after seven days, by e-mail.

The survey consisted of nine questions investigating the process of developing each district’s Nutrition and
Wellness Policy, as well as his or her general assessment of the committee’s planning and implementation process. The format of the questions included short answers, forced choice, and Likert scale attitudinal items (see Appendix A). Together, these data created a "snapshot" of the school food environment, plus nutrition education and physical activity components, board influence, barriers, the ease of policy change, and program policy implementation. In addition, an interview was conducted with the School Health Consultant from the San Bernardino County Superintendent of Schools Office regarding her perceptions of the difficulties experience in six small districts with which she worked to devise their nutrition and wellness policies.

All surveys, forms, and procedures were approved by the Institutional Review Board of California State University, San Bernardino (see the letter of approval and stamped copies of consent forms in Appendix C). Participants were reminded that they could withdraw from the study at any time. In an effort to protect the identity of all respondents, e-mail records were separated from survey results, and information collected via telephone was reported without disclosing interviewees’ names.
The data were collected and entered into an SPSS database for quantitative analysis. Descriptive statistics (frequencies) were calculated for each item. In addition, content analysis of written comments was also conducted.
CHAPTER FOUR
RESULTS AND DISCUSSION

Introduction

Displayed below are the results of the survey to assess the difficulties or barriers the school districts experienced while making changes to meet the mandated Nutrition and Wellness Board Policy. Findings were summarized from 16 school districts throughout San Bernardino County, California, ranging in size from large urban school districts to small rural districts with no designated Nutrition and Wellness personnel. In addition, results of an interview with the school district consultant who communicated with wellness policy coordinators from the small districts are included.

Survey Findings

Question #1: What is your role in the school, community, or agency? Table 1 displays information from respondents who answered the survey comprised of seven Nutrition staff members. Remaining members were consultants, directors, superintendents, health service coordinators, and administrative assistants.
Table 1. What Is Your Role in the School, Community, or Agency?

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition Staff</td>
<td>7</td>
<td>43.7</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>56.3</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Question #2: Who is serving on your Advisory Committee for development of nutrition and wellness policies? According to Table 2, 14 districts have parents serving as advisors, while two districts do not have parents serving on their committees. Sixteen District nutrition staff members are assisting as advisors in all districts. In addition, there were only six districts out of 16 that actually used a public health nutritionist; therefore, 10 districts did not have a public health nutritionist to assist in the nutrition and wellness policies.
Table 2. Who Is Serving on Your Advisory Committee for Development of Nutrition and Wellness Policies?

<table>
<thead>
<tr>
<th></th>
<th>Frequency (n=16)</th>
<th>Percent &quot;Yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>14</td>
<td>87.5</td>
</tr>
<tr>
<td>Nutrition Staff</td>
<td>16</td>
<td>100.00</td>
</tr>
<tr>
<td>Public Health Nutritionists</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>PE Teachers</td>
<td>10</td>
<td>62.5</td>
</tr>
<tr>
<td>Health Teachers</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>Prevention Coordinators</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Board Members</td>
<td>8</td>
<td>50.0</td>
</tr>
</tbody>
</table>

Ten districts have a Physical Education teacher serving on their committee, while six do not have a PE teacher who advises the committee for nutrition and wellness (which is required to include an activity component). The health teachers at six out of 16 districts serve on the advisory committee, while 10 districts do not have a health teacher acting as an advisor for the nutrition and wellness policies.

Five districts utilized district Title IV prevention coordinators on their advisory committees, while 11 districts did not utilize a prevention coordinator for the development of the wellness policies. In addition, eight districts had board members on their advisory committees,
and eight districts did not have district board members serving as advisors for the wellness policy.

Data suggest that most school district Nutrition and Wellness Committees did not have broad representation from health education teachers, physical education teachers, school or community nutritionists, or school nurses (even though the federal amendment requires policy and programmatic changes in these areas). Overall results indicated one possible reason why so many districts reported delays in implementing their adopted policies.

Question #3: What kinds of changes are you making in regards to nutrition services on your campus? According to Table 3, only three districts out of 16 have made changes in regard to the contents in vending machines, candy sales, and low fat foods. Nine districts made a combination of changes that include changes in menu items, elimination of à-la-carte entrées and using non-food incentives. Another three districts have added more nutritious foods in their food choices with more nutrients while one out of 16 districts made no changes.
Table 3. What Kinds of Changes are You Making in Regards to Nutrition Services on Your Campus?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vending</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Candy sales</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Lowfat options</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>More nutrients</td>
<td>3</td>
<td>18.75</td>
</tr>
<tr>
<td>No changes</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Combination</td>
<td>9</td>
<td>56.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As indicated in Table 4, the most common difficulty in modifying menu items or foods sold is dealing with cost, identified in three of the 16 school districts. Four districts respondents reported resistance to change, especially with fundraising activities and the removal of soda sales on campus. Eight districts described a combination of both acceptance and resistance, from students and staff alike, regarding school fund-raisers, and vending machine options.
Table 4. Do You Foresee any Difficulties or Barriers in Making These Changes?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>3</td>
<td>18.75</td>
</tr>
<tr>
<td>Acceptance by staff</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Acceptance by students</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Combination and other</td>
<td>8</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Question #4: What kinds of changes are you making in regards to nutrition education on your campus? According to Table 5, eight out of 16 districts were able to expand instruction to include nutrition education, while three out of 16 made no changes to teach nutrition education.

Several districts respondents reported that 5-a-day curriculum materials and Dairy Council materials from outside sources would meet the education standards. Four districts asserted that utilizing school menus, posters displays, and sending home nutritional information would meet the standard.
Table 5. What Kinds of Changes are You Making in Regards to Nutrition Education on Your Campus?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand instruction</td>
<td>8</td>
<td>50.0</td>
</tr>
<tr>
<td>No changes</td>
<td>3</td>
<td>18.75</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

According to Table 6, two out of the 16 districts respondents reported staffing difficulties. The lack of qualified health educators to teach the nutrition classes.

Table 6. Do You Foresee Any Table Difficulties or Barriers in Making These Changes?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Few/no curricular changes</td>
<td>9</td>
<td>56.25</td>
</tr>
<tr>
<td>Combination or other</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Nine districts respondents reported very few difficulties in providing more nutrition information, since they continually integrate new themes into their curriculum. The factors which were of concern in several
districts included time for instruction, testing, graduation requirements, overcrowding in general, and the increased instruction time required. Five districts out of 16 reported a combination of all four: staff discontent, time, costs, and graduation requirements.

Question #5: What kind of changes are you making in regards to physical activity on your campus? As seen in Table 7, only one school respondent pointed out the need to add new instruction. Four districts actually expanded instruction, and seven district respondents revealed that there was no change needed since they have extra physical programs both before and after school, on campus. In four districts, students are rewarded for physical fitness activities, and they are changing the physical education curriculum to include more time for classroom training.

Table 7. What Kinds of Changes are You Making in Regards to Physical Activity on Your Campus?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>New instruction</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Expanded instruction</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>No changes</td>
<td>7</td>
<td>43.7</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>
All districts reported that there was no need to increase staff, and twelve districts stated that there were no difficulties. Four districts anticipated a combination of issues with staffing, time for instruction each week, and obtaining grants to purchase more physical education equipment.

Table 8. Do You Foresee Any Difficulties or Barriers in Making These Changes?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>75.0</td>
</tr>
<tr>
<td>Combination</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Question #6: How will the school district or the committee monitor and enforce the new policies? As shown in Table 9, one district has developed a survey for all the departments to ensure compliance. Six districts are using on-site observers, nine of the districts are keeping records of any changes or problems, and all districts have a method in place to monitor the new policies. To date, none of the districts have put in place a combination of
Nutrition and Wellness committee meetings, fitness testing, and feedback.

Table 9. How Will the School District or This Committee Monitor and Enforce the New Policies?

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Observation or interview</td>
<td>6</td>
<td>1.0</td>
</tr>
<tr>
<td>Keeping records</td>
<td>9</td>
<td>56.25</td>
</tr>
<tr>
<td>No method</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Combination or other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Fourteen district respondents desired their committee to continue to function for accountability purposes. One district has decided not to have a committee oversee the new policy effects, and one district has not made a decision.
Table 10. Will This Committee Continue to Function, Once the New Programs Are Put in Place?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>87.5</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Not sure</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Question #7: In general, what are some problems or barriers to developing and/or implementing the new Nutrition and Wellness Policy? According to Table 11, five districts were concerned with cost, meaningful training, curriculum changes, hiring additional staff, nutrition promotion, and fund raising changes. Nine districts experienced resistance from staff, parents, and parent organizations because they felt like selling candy, soda, and similar food during classroom parties is acceptable.
Table 11. In General, What are Some Problems and/or Barriers in Developing and/or Implementing the New Nutritional Wellness Policy?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Acceptance</td>
<td>9</td>
<td>56.25</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Two district respondents pointed out that time and resources are in demand, and that monitoring this program may place a burden on everyone who is involved in its implementation. Secondly, making the policy too stringent could turn personnel in the districts against it.

Question #8: In general, how well has this committee functioned in developing the new nutritional and wellness policy? As illustrated in Table 12, only one district rated the clarity of the task as a fair, 10 rated clarity of the task as good, and five rated clarity of task as excellent.
Table 12. In General, How Well Has This Committee Functioned in Developing the New Nutrition and Wellness Policy? (Clarity of Task)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>1</td>
<td>6.25</td>
</tr>
<tr>
<td>Good</td>
<td>10</td>
<td>62.5</td>
</tr>
<tr>
<td>Excellent</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Displayed in Table 13, four district respondents scored the district’s guidance as fair, seven respondents rated the district’s guidance as good, and five respondents rated their district’s guidance as excellent.

Table 13. In General, How Well Has This Committee Functioned in Developing the New Nutritional and Wellness Policy? (District Guidance)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>Good</td>
<td>7</td>
<td>43.75</td>
</tr>
<tr>
<td>Excellent</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In Table 14, communication between committee members while developing the new policy was as fair by two respondents,
another eight respondents scored this as good, and six districts out of 16 rated this as excellent.

Table 14. In General, How Well Has This Committee Functioned in Developing the New Nutrition and Wellness Policy? (Communication)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Good</td>
<td>8</td>
<td>50.0</td>
</tr>
<tr>
<td>Excellent</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Regarding the perceived appropriateness, Table 15 measured time line and two respondents rated this as fair, six respondents scored the timeline good, and eight respondents scored it as excellent.

Table 15. In General, How Well Has This Committee Functioned in Developing the New Nutrition and Wellness Policy? (Measured Time Line)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Good</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>Excellent</td>
<td>8</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>
In Table 16, the smaller districts respondents gave no comment on their resources, four other respondents rated resources as fair, five respondents rated resources as good, and six districts out of 16 respondents reported excellent resources for developing this policy.

Table 16. In General, How Well Has This Committee Functioned in Developing the New Nutrition and Wellness Policy? (Adequate Resources)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fair</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>Good</td>
<td>5</td>
<td>31.25</td>
</tr>
<tr>
<td>Excellent</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Question #9: Do you have any final comments regarding the federal legislation requiring a nutrition and wellness policy, or regarding the district’s procedure for responding to the mandate? The comments varied widely among the respondents. Three respondents expressed concern that this was an unfunded federal mandate. This remark is inaccurate, because each district is currently receiving funds and is mandated to implement these policies to assure continued funding from the Secretary of
Agriculture. A total sum of four million dollars will remain available until 2009.

The smaller districts that were out of compliance indicated their perception that non-compliance lacks consequences. This statement is also inaccurate, since the districts will jeopardize their funding and support from the government in the future if they do not implement the new policies.

One respondent felt that school districts were being unduly burdened by social issues, e.g., obesity, and that the public education system was given the blame for the current crisis. As noted by Dr. Clark, the respondent at this school site may not be familiar with the concept of Coordinated School Health as a planned and integrated school program, within the context of current family- and community-based interventions, as well as market-driven changes in fast foods (K.R. Clark, personal communication, October 16, 2006).

One respondent, feeling overwhelmed with the changes, suggested that there may be a need for a district consultant who could take care of the implementation and coordination, in cooperation with key members of the district to make sure that the district remains in compliance. This responsibility could be assigned to each
district's Prevention Coordinator, who is already supported by Title IV, possibly Title I, and other categorical health-related funds. However, smaller districts may lack the critical mass of funding to support such a position.

Three respondents were content and acknowledged that there needed to be a collective effort. The goals must be to work toward a health and wellness raised consciousness.

Interview Results

The role of the San Bernardino County Superintendent of Schools Office is, among other things, to provide guidance and staff support in areas of educational programs and administration which small school districts cannot adequately handle (K.R. Clark, personal communication, May 8, 2007). Thus, a school district consultant from the San Bernardino County Superintendent of Schools Office worked with six small districts on the preparation of their nutrition and wellness policies.

Interviewing the school district consultant gave clarity about barriers for the smaller districts. According to the consultant, the difficulties in smaller districts include cost and lack of staffing. Implementation was also hindered by the fact that the
superintendent of a smaller district may also be responsible for teaching at one of the school sites.

These smaller districts plan to continue seeking advice from the school district consultant as they plan ongoing changes with limited resources. Regular meetings will be held three times a year to discuss ongoing changes. The district directors of all six districts will continue to function as there are ongoing topics.

The school district consultant also plans to conduct a process evaluation by monitoring and recording district actions. However, evaluations of nutrition and wellness services will be delayed until the 2007-2008 school year.

Reflecting on the consulting process with the smaller districts, the consultant rated clarity of task as good, guidance from school districts as fair, and communication as fair, time line for task completion as good and adequate resources for task completion as poor. She raised an important point about current legislation lacking immediate consequences for school district non-compliance; therefore, the small districts may not be quick to make changes. On a positive note, the consultant did acknowledge that the current legislature has raised consciousness in terms of nutrition and wellness.
Discussion of the Findings

The County of San Bernardino has a total of 33 school districts, 16 of which completed the survey for a 48% response rate. In addition, an interview was conducted with the School Health Consultant from the San Bernardino County Superintendent of Schools Office regarding her perceptions of the difficulties experience in six small districts with which she worked to devise their nutrition and wellness policies. It appeared that the advisory committees were diverse in their make-up across the districts, including an unpredictable assortment of teachers, school nurses, nutrition site staff, physical educators, and/or board members. During the creation of the nutrition and wellness policy, however, resistance from board members was reported, especially with changing the way the instructional staff manages classroom or school events, including fund-raising through the sale of food items.

As a result of this policy initiative, to date, nutrition staffs have removed all sodas and candy and have incorporated creative ways of raising funds that do not involve unhealthy snacks or foods. Some nutrition staff members reported that food service staff has placed
posters centered on nutrition in view of students, hoping that this would aid in compliance.

It is evident that some district personnel do not perceive this as a funded mandate, even though they are currently receiving federal support for the free and reduced lunch program according to the Public Law 108-265 (CSBA, 2005). In contrast to the respondents' perceptions, there is a very real consequence of noncompliance, i.e., losing these federal funds. This discrepancy in their perceptions may be one area requiring focus in communications from the San Bernardino County Superintendent of Schools Office, which oversees the development and implementation of the Nutrition and Wellness Policies.

The development and implementation of the Nutrition and Wellness Policy is part of a multi-level strategy to improve the activity and nutrition levels of all students throughout the U.S. However, it is apparent in most responses that adopting and implementing these policies within the districts studied were rarely seen as their part in a larger nationwide effort.
Summary

In summary, the findings indicated that districts in the county of San Bernardino are facing difficulties complying with their own new adoptions, and smaller districts acknowledged that additional guidance would come from the County Superintendent of Schools Office. This guidance, during quarterly meetings, should include identifying nutrition education curricula to be implemented at each grade level, based on the newly drafted California State Health Education Standards and/or health education curricula currently on the state's adoptions list.

Most districts appear unaware or chose to ignore all the possibilities afforded them. In addition, they lack a well qualified Prevention Coordinator who could oversee and monitor nutrition and wellness policy changes.
CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

Introduction
The obesity epidemic is one of the greatest public health, social, and economic challenges of the 21st Century. Without the strong commitment and participation from both the private and public sectors, including public schools, the epidemic is not likely to be reversed. It takes the leadership of a knowledgeable and respected local person identified as a leader or champion to initiate and guide changes. The identity of this champion varies from community to community, i.e., s/he might be a superintendent, school board member, school administrator, food service director, parent, student, teacher, community health professional, or community leader.

Observations
In recent years, schools have promoted physical activity and healthy eating consistent with the fundamental mission of schools as described in the Coordinated School Health literature (California Department of Education, 2003). This includes district level responses to state legislation banning snack foods.
and sugar drinks, and the governor's recent challenges for increased fitness and activity.

However, the information extracted from this survey research showed that the federally mandated Nutrition and Wellness Policy was given little thought in design and implementation in many of the districts. Many of the smaller districts merely accepted the well intended guidance and language provided by the County Superintendent of Schools Office, without truly assuming local district interest or responsibility for the outcome.

Recommendations

1) The smaller districts in the County of San Bernardino should meet quarterly with the County Superintendent of Schools Office to discuss effective changes in physical activity, healthy eating, and nutrition curriculum to achieve greater compliance with the federal mandate (and their own adopted policies).

2) The federal government, California Department of Education, and/or the local County Office should create a sequential K-12 curriculum guide to assist districts in their nutrition education efforts.
3) Each district should identify and assign a qualified prevention coordinator or similar key position to re-evaluate and monitor policies that provide physical activity, healthy eating, and nutrition education curriculum.

4) Each district should reconstruct its advisory committee with broader representation that reflects a more community-wide effort.

In addition, the school districts must identify measurable indicators to assess whether they have succeeded in reaching the target perceived outcome (Goodman, 1997). Districts need to eliminate unaccountable outcomes that cannot be substantiated with measurable indicators. Programs and procedures must change over time to become and remain strong and sustainable.

According to Hunter (2006), large organizations facing change must consider the following elements:

1) Program/service activities;
2) Program/service venues;
3) Staffing requirements (including staff roles, knowledge, experience, credentials);
4) Infrastructure requirements (e.g., space, support materials);
5) Organizational system requirements (e.g., staff recruitment and development, retention practices, and performance tracking);
6) Current program/service budget and an assessment of its sufficiency;
7) Strategic partners - without other organizations providing essential services to clients, they cannot succeed.

It is unclear whether these organizational considerations were fully anticipated and addressed strategically in the creation and adoption of the nutrition and wellness policies in most school districts.

Recommendations for Further Research

Because of the limitations of this one-time survey, data are lacking regarding the ongoing implementation and evolution of these school districts’ policies and programs over time, including the existence (or lack of) additional community partners, state or federal incentives, and shifts in staff/parent/administrator perceptions regarding the importance of these policies and programs. A multi-year prospective study of diverse school districts could further disclose the achievements and barriers faced in school districts across the state or nation.
At a state or national level, consideration should also be given to the relative contribution of these school-based efforts to the reduction of the childhood obesity problem facing the U.S., in comparison to the impact of changes in fast food marketing practices and/or regulations related to food availability. As in the case of California's seatbelt laws and tobacco initiative, the greatest and most expedient changes may be attributable to broader regulatory action as a complement to school-based educational efforts.
APPENDIX A

WELLNESS POLICY SURVEY
Wellness Policy Interview

Interview Date: ___________________  School District: __________________________

1) What is your role in the school, community or agency? (check one)
   ( ) Parent       ( ) School District Nutrition Staff       ( ) Public Health Nutritionist
   ( ) PE Teacher   ( ) Health Teacher                ( ) School District Prevention Coordinator
   ( ) School Board Member      ( ) Other: ________________________________

2) Who is serving on your Advisory Committee for development of wellness policies? (check all that apply)
   ( ) Parent       ( ) School District Nutrition Staff       ( ) Public Health Nutritionist
   ( ) PE Teacher   ( ) Health Teacher                ( ) School District Prevention Coordinator
   ( ) School Board Member      ( ) Other: ________________________________

3) What kinds of changes are you making in regards to nutrition services on your campus?

   3a) Do you foresee any difficulties or barriers in making these changes (e.g., staffing issues, cost, student or parent acceptance, board approval, etc.)?

4) What kinds of changes are you making in regards to nutrition education on your campus?

   4a) Do you foresee any difficulties or barriers in making these changes (e.g., staffing issues, cost, student or parent acceptance, board approval, etc.)?

5) What kinds of changes are you making in regards to physical activity on your campus?

   5a) Do you foresee any difficulties or barriers in making these changes (e.g., staffing issues, cost, student or parent acceptance, board approval, etc.)?

6) How is the School District or this Committee going to monitor and enforce the new policies?

   6a) Will this Committee continue to function, once the new programs and policies are put in place?
7) In general, what are some problems or barriers to developing and/or implementing the new Wellness Policy?

8) In general, how well has this Committee functioned in developing the new Wellness Policy? Please rate the following:

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<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
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<tbody>
<tr>
<td>Clarity of the Task</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Guidance from School District</td>
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<td>2</td>
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<tr>
<td>Communication</td>
<td>1</td>
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<td>Appropriate Timeline for Task Completion</td>
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<td>Adequate Resources for Task Completion</td>
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</table>

Comments:

9) Do you have any final comments regarding the Federal legislation requiring a Nutrition and Wellness Policy, or regarding the district’s procedure for responding to the mandate?

Thank you for your time,
Mary-Jean Stevenson
APPENDIX B

INTRODUCTION LETTER
Introductory Remarks

"The study in which you are being asked to participate in is designed to investigate the process of developing your school district’s Nutrition and Wellness Policy.

"This study is being conducted by Mary-Jean Stevenson under the supervision of Dr. Kim Clark, Associate Professor in the Department of Health Science and Human Ecology. This study has been approved by the Institutional Review Board, California State University, San Bernardino.

"In this interview, you will be asked to respond to several questions about your school district’s proposed nutrition and wellness policies, as well as your general assessment of the committee’s planning process. The interview should take about 15 to 20 minutes to complete. All of your responses will be held in the strictest of confidence by the researcher. Your name will not be reported with your responses. All data will be reported in group form only. You may receive the group results of this study upon completion by contacting Mary Jean Stevenson or Dr. Clark at 909-537-5323.

"The possible benefits of this study include improving the process of developing school district wellness policies; there are no foreseeable risks associated with this study. Your participation in this study is totally voluntary. You are free not to answer any questions and withdraw at any time during this study without penalty.

"By placing a check mark in the box below, you acknowledge that you have been informed of, and that you understand, the nature and purpose of this study, and that you freely consent to participate. You also acknowledge that you are at least 18 years of age."

Please place a check mark here □

(NOTE: Leave this Introduction with the Interviewee for their reference.)
APPENDIX C

LETTER OF SUPPORT
August 31, 2006

TO: Michael Gillespie, Secretary  
    CSUSB Institutional Review Board

FROM: Christine Ridley, School Health Services Coordinator  
      San Bernardino County Superintendent of Schools

RE: Support for Mary Jean Stevenson’s Research Proposal

This is to inform you of my support and willing cooperation with Mary-Jean Stevenson’s proposed community-based research project entitled, “Barriers to the Development of School District Nutrition and Wellness Policies.”

I understand that our office will collaborate with Mary Jean on the dissemination of a survey to selected members of school nutrition and wellness committees in the Riverside and San Bernardino County area, which have been developing school nutrition and wellness plans under my guidance.

This is a valuable project which will contribute to a better understanding of the process of policy and program development and implementation for this new Federal mandate.

Please do not hesitate to contact me if you need additional information.
REFERENCES


