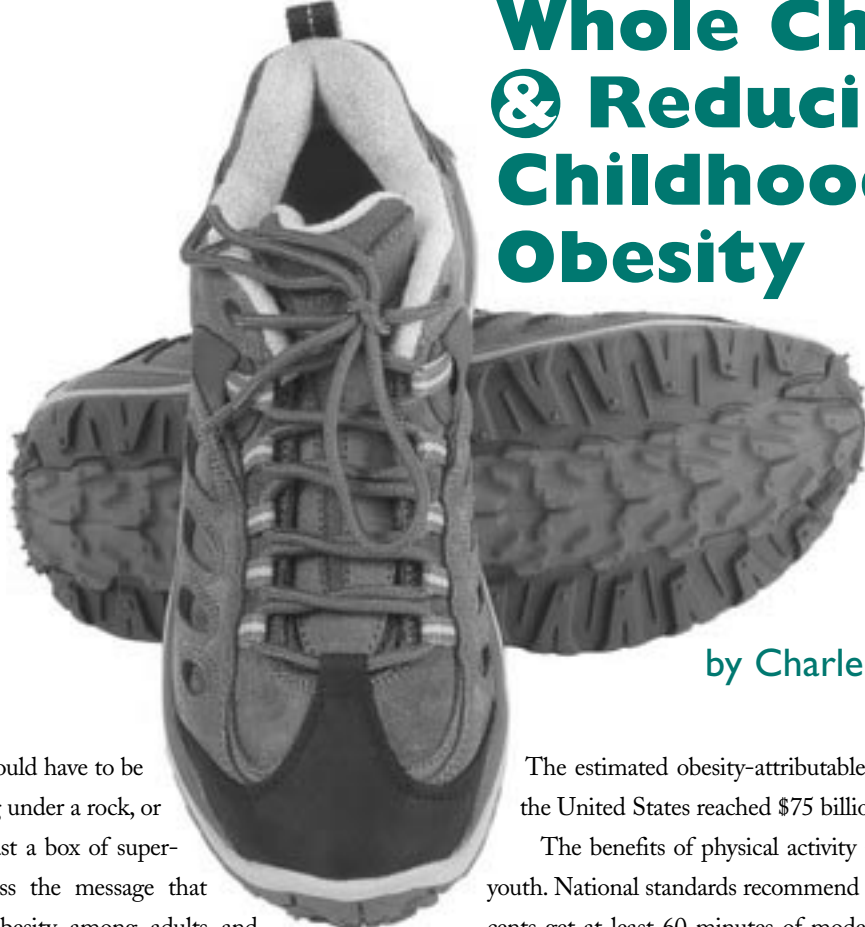


Physical Education's Critical Role in Educating the Whole Child & Reducing Childhood Obesity

by Charlene R. Burgeson



One would have to be living under a rock, or at least a box of super-sized fries, to miss the message that overweight and obesity among adults and youth is a public health problem of epidemic proportions. Because overweight and obesity negatively affect individuals' health and well-being, and thus their productivity, the problem extends into the education and business worlds. Physical inactivity and poor diet account for an estimated 400,000 deaths per year, second only to tobacco use among preventable causes of death.¹ Most major preventable causes of death have declined or minimally changed since 1990, but there has been a 33 percent increase in deaths due to poor diet and physical inactivity.² The percentage of young people who are overweight has tripled in the last 30 years. Among children aged 6–19 years, 16 percent are considered overweight and an additional 31 percent are at risk for overweight.³

Overweight children and adolescents are more likely to be overweight or obese as adults, and overweight adults are at increased risk for heart disease, high blood pressure, stroke, diabetes, some types of cancer, and gallbladder disease.⁴ Chronic disease accounts for seven out of every 10 deaths in the United States and more than 75 percent of medical care expenditures.⁵

The estimated obesity-attributable medical expenditures in the United States reached \$75 billion in 2003.⁶

The benefits of physical activity apply to both adults and youth. National standards recommend that children and adolescents get at least 60 minutes of moderate to vigorous physical activity each day.^{7,8} For youth, physical activity helps to reduce the risk of developing obesity and chronic diseases, build and maintain healthy bones and muscles, reduce feelings of depression and anxiety, and promote psychological well-being.⁹ Despite these benefits, many children and adolescents are not getting the recommended amount of physical activity. One-third of young people in grades 9–12 get an insufficient amount of physical activity and over 10 percent get no physical activity.¹⁰

Promoting regular physical activity and healthy eating, and creating environments that teach and support these behaviors, are essential to reducing the obesity epidemic. One key environment for reaching young people is schools. Most school-aged children regularly attend school, and school accounts for a major part of a child's day. Whether a child is at school during only the academic school day, or for an extended day that includes after-school care or activities, there are numerous opportunities to learn about and participate in physical activity and healthy eating. Truly, the school is a learning laboratory. Therefore, a critical element in linking learning to student behavior is to ensure that the laborato-

ry experiences (e.g., school lunch, recess, after-school programs) coincide with educational instruction (e.g., physical education, health education). Schools have a responsibility to help children develop the skills, knowledge, and confidence necessary to adopt and maintain a healthy lifestyle.

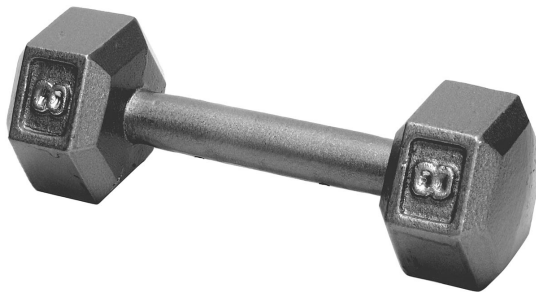
Comprehensive School Physical Activity Program

Physical education is at the core of a comprehensive approach to promoting physical activity through schools. A school physical activity program should consist of physical education, health education (which includes information about physical activity), recess for elementary school students, intramural sport programs and physical activity clubs, and interscholastic sports for high school students. Ideally, it will also include physical activity breaks, walk/bike to school programs, appropriate physical activity in after-school childcare programs, and staff wellness programs.

There tends to be confusion about the difference between physical activity and physical education, and this misunderstanding sometimes leads to the impression that physical education can be addressed through recess or community programs. This is not the case, however. Physical activity is a behavior, and physical education is a curricular area that helps students to develop physical skills while engaging in physical activity. Providing time for unstructured physical activity is not the same as providing instructional time for meeting the goals of quality physical education.

Physical Education

The public health agenda for our country, reflected in *Healthy People 2010* and *Healthier U.S.*, calls for school physical education and health education to be priorities in disease prevention. Several organizations and government agencies have official statements in support of physical education for all students. The National Association for Sport and Physical Education (NASPE), Centers for Disease Control and Prevention, and the National Association for State Boards of Education (NASBE) all recommend daily physical education or its equivalent (150 minutes per week for elementary school students and 225 minutes per week for



middle and high school students).¹¹⁻¹⁵ Most states and school districts require physical education at all three school levels, and almost all schools require students to take some physical education. However, most students are not receiving the recommended amount of physical education. The percentage of schools that require physical education declines from around 50 percent in grades one through five to 25 percent in grade eight, and down to only five percent in grade 12.¹⁶ Only eight percent of elementary schools and only six percent of middle and high schools provide daily physical education for the entire school year for students in all grades in the school.¹⁷ Only 28 percent of high school students attend physical education class daily, and the trends are not positive.¹⁸ The percentage of students who daily attend physical education class declined significantly from 1991 (42 percent) to 1995 (25 percent) and did not change significantly from 1995 to 2003.¹⁹

To understand the role of physical education in educating the whole child, promoting physical activity, and reducing obesity, one must understand that the goal of physical education is to help all students develop the knowledge, skills, and confidence needed to be physically active in and out of school and throughout their lives. A physically educated person is defined as someone who:

- ❖ Has learned the skills necessary to perform a variety of activities;
- ❖ Knows the implications of, and the benefits from, involvement in physical activities;
- ❖ Participates regularly in physical activity;
- ❖ Is physically fit; and
- ❖ Values physical activity and its contributions to a healthful lifestyle.²⁰

Like other subject areas, for physical education to be provided in a quality manner, it must include four essential elements. These elements are: (1) the opportunity to learn, (2) meaningful content,

(3) appropriate instruction, and (4) student and program assessment. Opportunity to learn refers to policies and practices that make it possible to provide a quality program, such as certified teachers, adequate time, and safe facilities and equipment.²¹⁻²³

In 1995, NASPE formally defined meaningful content by publishing the National Standards for Physical Education. The standards, revised in 2004, define what a student should know and be able to do as a result of a quality physical education program. The six standards define a physically educated person as someone who:

- ❖ Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities;
- ❖ Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities;
- ❖ Participates regularly in physical activity;
- ❖ Achieves and maintains a health-enhancing level of physical fitness;
- ❖ Exhibits responsible personal and social behavior that respects self and others in physical activity settings; and
- ❖ Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.²⁴

In recent years, physical education has reinvented itself. In the “New P.E.,” gone are tedious calisthenics, the exclusion of low-skilled students by captains who pick teams, and the three-season sport curriculum of football, basketball, and baseball. Instead, students in quality physical education programs are learning to do a wide variety of contemporary activities such as inline skating, tennis, golf, step and slide aerobics, weight training, biking, martial arts, rock climbing, yoga, and canoeing, as well as traditional sports such as basketball, soccer, volleyball, gymnastics, and track.

The focus has shifted from competition to performance and personal challenges, high levels of fitness that support good health, and exposure to a variety of sport and fitness activities.²⁵⁻²⁷ The new message that schools are giving kids about exercise is simple: Physical activity comes in many forms, and there is

something for everyone. Physical activity must be a regular part of every day life, as commonplace and important for good health as brushing one’s teeth.

A picture of quality physical education can be painted by the positive physical education pledge, which states: “As a highly qualified physical education teacher, I pledge to:

- ❖ Establish a positive, safe learning environment for all students;
- ❖ Teach a variety of physical activities that make physical education class fun and enjoyable;
- ❖ Create maximum opportunities for students of all abilities to be successful;
- ❖ Promote student honesty, integrity and good sportsmanship;
- ❖ Guide students into becoming skillful and confident movers;
- ❖ Facilitate the development and maintenance of physical fitness;
- ❖ Assist students in setting and achieving personal goals;
- ❖ Provide specific, constructive feedback to help students master motor skills;
- ❖ Afford opportunities for students to succeed in cooperative and competitive situations; and
- ❖ Prepare and encourage students to practice skills and be active for a lifetime.”²⁸





Educating the Whole Child

A comprehensive curriculum is critical to educating the whole person and developing each child's unique talents and full potential. Humans are not one-dimensional beings. Individuals have intellectual, physical, social, and emotional elements and needs. These elements are not independent, but rather highly interdependent. A comprehensive curriculum is necessary to prepare students for a comprehensive lifestyle—one that includes cultural, social, scientific, historical, physical, artistic, linguistic, technological, mathematical, and emotional knowledge and abilities.

Teaching about the physical being is the unique contribution of physical education and health education. Quality physical education and health education programs provide the foundation for healthy, active lifestyles that support all learning and help ensure success in future pursuits. While both subjects teach about physical functioning, care, and health, only physical education teaches and practices physical movement and performance. A strong mind needs a strong and healthy body in which to reside. Statistics related to chronic disease, disability and death, health care costs, and quality of life issues clearly illustrate that there are severe problems associated with attending to the intellectual, but not the physical being.

Physical education is a critical component of schools' efforts to address student health and academic achievement holistically. Physical education is one of the eight components of a coordinated school health program. The other seven

components are health education; health services; nutrition services; counseling, psychological, and social services; healthy school environments; health promotion for staff; and family and community involvement. Physical education and health education are the only two curricular areas in the program model.

Recent national surveys by the Robert Wood Johnson Foundation (RWJF) and NASPE show that parents, teachers, and students believe that physical education should be a critical component of the school day. The 2004 RWJF poll found that 85 percent of parents and 81 percent of teachers believe that students should be required to take physical education every day at every grade level, and more than 75 percent of parents and teachers believe that school boards should not eliminate physical education for budgetary reasons or because of the need to meet stricter academic standards.²⁹ Similarly, in NASPE's 2003 and 2002 national surveys of parents and teens, 95 percent of parents said that physical education should be included in the school curriculum for all students in kindergarten through grade 12,³⁰ and 92 percent of teens said that they should receive daily physical education.³¹

Quality physical education supports and expands the total educational program for all students. Policymakers, school administrators, teachers, and families must join together to provide a balanced and comprehensive education of the whole child for life in the 21st century.

Challenges to Providing Quality Physical Education

For many years, schools have been challenged by trying to fit all subjects and activities into the school day. The values, needs, and resources of states and local communities have driven heated philosophical discussions and difficult decisions about priorities. It is not new to subjects such as art, music, and physical education to have to fight for a place and adequate time in a crowded curriculum. Erosion of the comprehensive curriculum, or "narrowing of the curriculum," has been an ongoing problem. However, the magnitude of this problem has increased dramatically since passage of the federal No Child Left Behind Act (NCLB) of 2002, which focuses on student achievement in core subjects. Title IX, Part A, Section 9101, of the law says that "The

term ‘core academic subjects’ means English, reading or language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography.”³²

In a recent study on how NCLB is influencing instructional time and professional development, three-quarters of all principals surveyed said that instructional time for reading, writing, and mathematics is increasing greatly or somewhat, and almost half reported increased instructional time for science. Additionally, over 50 percent reported moderate or large increases in time for teachers to enhance their skills and knowledge in those areas. It appears that this is happening at the expense of other subject areas, which are experiencing a reduction in instructional time. In the study, 29 percent of principals reported decreases in time for social studies, and 25 percent reported decreases for the arts.³³

Clearly, NCLB’s list of core subjects has created unintended consequences including diminished time and resources for the subjects not listed as core. One of NCLB’s major elements is a requirement for highly qualified teachers. The requirement applies only to teachers of the listed core subject areas. However, to provide a truly world-class, comprehensive education, it is critical that all teachers are highly qualified.

What States Can Do to Provide Quality Physical Education

In the United States, public education has always been a national priority, a state responsibility, and a local function.³⁴ NCLB is basically constructed on the idea that states and localities are best qualified to make decisions regarding how funds for education—including federal funds—should be spent. To receive federal funds, states must follow federal law; however, states have full authority to go above and beyond federal requirements. Thus, state legislatures and boards of education can create educational laws and regulations, respectively, that reflect and support their state’s needs and priorities.

Some of the most common state laws and regulations regarding physical education address the need to hire state-certified physical education teachers, classify physical education as a required curricular area, and enforce time requirements for physical education. At the state level, a positive action in support of physical education is that most states require elementary schools (78 percent of states), middle/junior high schools (86 percent of

states), and senior high schools (82 percent of states) to teach physical education.³⁵ However, many states decrease the effectiveness of this regulation by allowing students to be exempted from physical education requirements for one grading period or longer (41 percent for elementary school, 53 percent for middle/junior high school, and 60 percent for high school students).³⁶ While all opportunities for students to be physically active are important, NASPE and NASBE believe that it is inappropriate to substitute other physical activity experiences (e.g., varsity athletics, marching band, ROTC, community athletics) for physical education, since those experiences fail to address many of the fundamental objectives of a quality physical education program.^{37,38}

Four additional state-level actions are key to supporting the provision of high-quality instruction:

- ❖ **State coordination**—35 states and the District of Columbia have someone in their state who oversees or coordinates physical education;³⁹
- ❖ **Certification**—49 states offer certification, licensure, or endorsement to teach physical education, and the majority require newly hired physical education teachers to be state-certified, licensed, or endorsed in physical education;
- ❖ **Staff development**—66 percent of states provide funding for, or offer staff development on, physical education topics to those who teach physical education;⁴⁰ and
- ❖ **Using national standards**—the majority of states require districts or schools to follow national or state physical education standards or guidelines.⁴¹

As the statistics show, many states are requiring and supporting physical education. It appears that state policymakers understand the importance of physical education in the provision of a complete education, development of the whole child, and reduction of childhood obesity. States pay for many of the costs associated with education and health care. In today’s climate of educational accountability and state budget shortfalls, state policymakers could make a critical investment in their state’s future by supporting the inclusion of physical education in the state system of standards and accountability.

Summary

There is no question that the epidemic of obesity, created by inactivity and poor diet, is taking a toll on the health and quality of life of individual citizens' and on the health care budgets of states. Reducing obesity is a complex and long-term effort that will require numerous environmental changes, but certain facts are clear. Physical inactivity is part of the problem and physical activity is part of the solution. Physical education is an essential element of the solution because it can increase student participation in moderate to vigorous physical activity,⁴² and help students gain the knowledge, skills, and confidence needed to be physically active for a lifetime.^{43,44}

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