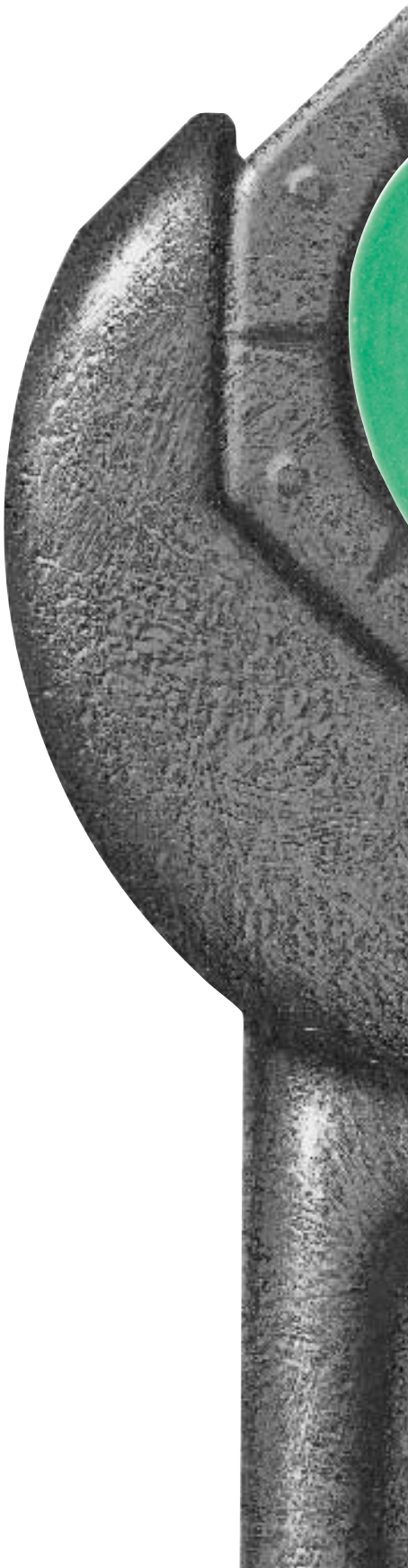
education Reform

& THE GOALS OF MODERN SCHOOL HEALTH PROGRAMS



What Is a Modern School Health Program & Why Is It Important?

Since *A Nation at Risk* was published nearly 20 years ago,[1] our country has been exploring various means to improve the educational performance of our young people.[2] Although few disagree with the intent of the Leave No Child Behind Act,[3] there remains spirited debate about the most efficient combination of means likely to achieve it. Many believe that modern school health programs could be critical among these means, not only to improve education performance, but also to improve the well being of our young people and the adults they will become.

Modern school health programs purposefully integrate the efforts and resources of education, health, and social service agencies. Such coordinated school health programs often combine eight components, including school health services; health education; efforts to assure healthy physical and social environments; food services; physical education and other physical activities; counseling, psychological, and social services; health programs for faculty and staff; and collaborative efforts of schools, families, and communities to improve the health of students, faculty, and staff.[4]

This article outlines how such programs can be designed strategically to help educators attain a range of specific objectives within four overlapping and interdependent types of goals for students. It concludes with a discussion of what our nation—along with state and local boards of education—can do to

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promote effective school health programs that help young people achieve higher standards of health and learning.

Type I Goals: Improving Health Knowledge, Attitudes, and Skills

In an increasingly technological world, young people need to develop fundamental skills to acquire information (e.g., to read), to analyze information (e.g., through mathematic and scientific methods), and to communicate information (e.g., to write). In addition to these fundamental skills, each society must continue to decide which information is most important for each generation to comprehend. Especially during the past several decades, humans have painstakingly developed an enormous amount of knowledge they could use to protect their own health, the health of families for which they will become responsible, and the health of communities in which they will reside.

For example, we have learned how to prevent what previously had been widespread communicable and noncommunicable diseases, as well as newly emerging and re-emerging ones. We have learned how to manage factors that erode and strengthen our mental health. And, we have learned how to control environmental toxins that endanger our homes, our communities, and our world. What knowledge can be more important to give young people than knowledge they can use throughout their lives to keep themselves and others alive and healthy, productive, and content?

Modern school health programs can improve specific knowledge and attitudes about health. They also can help young people develop related life skills including communication and interpersonal skills, decision making and critical thinking skills, and coping and self-management skills. These programs can be designed to

help students develop good character by promoting such core ethical values as caring, honesty, fairness, responsibility, and respect for self and others.[5] Through such programs, schools not only provide knowledge, they also help young people contemplate how to live their lives. As such, the philosophical and practical development of modern school health programs, and the training of those who implement various components of these programs, deserve more attention than is currently being provided by our nation's colleges of education and education agencies.

To enable students to acquire information, attitudes, and skills about history, geography, health, or any other topic, some process must determine what standard knowledge about that topic is most important for students at various grade levels to acquire. It also must assess the extent to which students have acquired it. This is especially critical today, since the development of standards-based education is a principal means to reform education and improve student performance.

To help develop standards for various programs (e.g., special education) and content areas (e.g., science, social studies), and to help develop instruments with which to measure these standards, the Council of Chief State School Officers (CCSSO) established a State Collaborative on Assessment and Student Standards (SCASS). To assess health literacy, SCASS created a 9 x 6 x 3 Assessment Framework Matrix.[6] The purpose was to develop test items within nine content areas (alcohol and other drugs, injury prevention, nutrition, physical activity, sexual health, tobacco, mental health, personal and consumer health, and community and environmental health) for six core concepts and skills that reflect the National Health Education Standards (accessing information, self management, internal and external influences, interpersonal communication, decision making/goal setting, advocacy)[7] across three grade levels (elementary, middle, and high school). The major purpose of the SCASS Health Education Assessment Project is to improve critical health literacy by guiding improvements in school health education planning and delivery.

Numerous studies have provided evidence that school health programs can improve critical health knowledge, attitudes, and skills. Attaining such Type I Goals could be considered a fundamental purpose of schools, irrespective of whether measured health behaviors or health outcomes also improve as a consequence.

Type II Goals: Improving Health Behaviors and Health Outcomes

School health programs also can be designed to improve specific health behaviors and outcomes. Indeed, modern school health programs could be one of the most efficient means nations might employ to prevent their most serious health problems.[8] For example, in the U.S., 71 percent of all deaths among young people aged 10 to 24 years—and an enormous number of injuries that do not result in deaths—occur from only four causes: motor vehicle crashes (32 percent); other unintentional injuries such as falls, fires, drowning, etc. (12 percent); homicide (15 percent); and suicide (12 percent).[9] Further, although they usually do not cause death in this age group, half of all new HIV infections are acquired by those younger then 25, and teens experience three million new sexually transmitted diseases (other than HIV) and nearly one million pregnancies each year.

Thus, some of the most serious health problems from which young people suffer result from just three types of behavior: behaviors that result in unintentional and intentional injuries, alcohol and other drug use, and sexual risk behaviors. For example, among the nation's ninth-twelfth grade students, 31 percent have ridden with a driver who had been drinking alcohol, 33 percent have been in a physical fight, 9 percent have attempted suicide, and 46 percent have engaged in sexual intercourse. These behaviors often are interrelated and cause not only health problems and

physical suffering, but serious educational and social problems as well. Resources, principally provided through the Leave No Child Behind Act,[10] are enabling education agencies to help prevent the illegal use of alcohol, tobacco, and drugs and to prevent violence in and around schools.

Among adults 25 years of age and older, 72 percent of all deaths—and an enormous number of injuries that do not result in death—are caused by five chronic diseases: heart disease and stroke (41 percent), cancer (23 percent), chronic obstructive pulmonary disease (5 percent), and diabetes.[11] These deaths and illnesses largely result from three types of behavior: tobacco use, unhealthy dietary patterns, and inadequate physical activity. For example, among the nation's ninth-twelfth graders, 29 percent smoke cigarettes, 79 percent do not eat the recommended amount of fruits and vegetables, 68 percent do not attend daily physical education classes, and 11 percent are overweight.

These behaviors usually are interrelated. They become established during youth, although symptoms of the chronic diseases to which they contribute usually do not appear until adulthood. Today, almost 100 million Americans live with one or more of these diseases, and they generate 60 percent of the $1 trillion we as a nation spend on health care each year.[12] Especially as our nation ages (e.g., those age 65 and older will increase from 34 million in 1996 to 70 million in 2030), unless we can prevent these behaviors, we all will pay increasingly higher health insurance rates. And, we increasingly will tax our medical, insurance, business, and economic systems to the breaking point.

Health agencies and colleges of public health and medicine have recognized the potential for schools to improve the health of young people and the adults they will become. Schools provide most of the mental health services delivered to children.[13] Thus, many agencies are working with schools to help provide critical health services—especially for students with disabilities and for indigent students.[14] School policies and programs that have been designed and implemented to achieve a specific Type II Goal can be effective. For example, programs have proven effective in significantly reducing student tobacco use, physical inactivity, unhealthy dietary patterns, and obesity.[15] School health programs for faculty and staff not only have reduced their health risks, but they also have reduced their absences and improved their morale.[16]

Further, school health programs can be very cost effective. For example, a school-based Hepatitis B vaccination program costs $31 per dose.[17] The same vaccination provided by a health maintenance organization (HMO) costs $68. It increases to $118 if expenses incurred by a full-time working father and part-time working mother are included.

A school program to prevent tobacco use prevented 35 students from becoming established smokers, saved $327,140 in medical care costs, and saved 23 years of life. A school health education program to reduce sexual risk behaviors prevented 24 cases of chlamydia, 3 cases of gonorrhea, 6 cases of pelvic inflammatory disease, and 19 pregnancies.[18] For every dollar invested in this program, $2.65 in total medical and societal costs were saved. As a final example, each year almost four million students suffer a substantial injury at school, costing $32 billion for medical care.[19] Annual school injury medical payments average $82,000 per secondary school and $11,000 per primary school. School prevention programs can be effective not only in preventing unintentional injuries but also in helping schools prevent expensive personal injury lawsuits.[20]

Attaining such Type II Goals to improve critical health behaviors and health outcomes among students and staff alike could be considered a fundamental purpose of schools, irrespective of whether measured education outcomes also improve as a consequence.

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Type III Goals: Improving Educational Outcomes

Children who are unhealthy—who are ill or injured, hungry or depressed, abusing drugs or pregnant—are less likely to learn than those who are not. Conversely, people who acquire more education not only are healthier and practice fewer health risk behaviors, but their children also are healthier and practice fewer heath risk behaviors.[21] Those who drop out of school experience more health problems, delayed employment, and poverty. CCSSO and the Association of State and Territorial Health Officials jointly noted this interdependency between health and education by suggesting that, "Healthy kids make better students, and better students make healthy communities."[22] Indeed, the National Health Objectives call for the U.S., by the year 2010, to increase to 90 percent the high school completion rate, to increase to 70 percent the proportion of schools that provide health education to prevent all the types of behavior listed earlier, and to increase to 50 percent the proportion of schools that have a nurse-to-student ratio of at least 1:750.[23]

Several reports summarize how school health programs designed to attain Type III Goals can improve education outcomes.[24] As one example, a school breakfast program for low-income elementary students reduced tardiness, absences, and symptoms of depression, anxiety, and hyperactivity. It also

improved standardized test scores and math grades.[25] Another school health program designed to teach low-income elementary school students and their parents how to better manage asthma significantly increased effective asthma management behaviors, reduced asthma episodes, and improved school grades.[26] Recent evidence suggests that poor indoor air quality in schools (e.g., from excessive temperature or humidity, outdoor pollutants or vehicle exhaust, airborne molds and bacteria, and chemicals in cleaning compounds or pesticides) can reduce a person's ability to perform specific mental tasks requiring concentration, calculation, or memory. It can cause acute health symptoms that decrease performance at school, and it can cause illness requiring absence from school among students and school staff alike.[27] The Environmental Protection Agency has developed no-cost and low-cost approaches that schools can use to control such pollutants.[28]

As these few examples illustrate, school health programs could become one of the most efficient means available to improve educational outcomes. Attaining such Type III Goals is considered *the* fundamental purpose of schools, irrespective of whether other important social outcomes also improve as a consequence.

Type IV Goals: Improving Social Outcomes

Schools are the main organizations that develop young people in our nation, our states, and our communities. Schools influence not only the physical and intellectual development of young people, but their psychological, emotional, and social development as well.[29] Many believe that schools and communities could implement youth development programs not only to help prevent health, education, and social *problems*, but also to help young people develop important positive *assets*. For example, many schools and communities have helped young people bond with families, schools, and communities; develop resilience, self-determination, self-efficacy, a clear and positive identity, belief in the future, and prosocial norms; and engage in prosocial activities.[30]

Increasingly, schools and communities together are building systems that address persistent barriers to student learning and psychological, emotional, and social development.[31] For example, one framework focuses on enhancing regular classroom strategies to improve instruction for students with mild-moderate behavior and learning problems. It assists students and families as they negotiate school-related transitions, increases home involvement with schools, and responds to and—where feasible—prevents crises.

It increases community involvement and support (including enhanced use of volunteers), and it facilitates student and family access to specialized services when necessary.[32] "Full service community schools"—working in partnership with a wide range of youth-serving agencies, during and beyond regular school hours, on the school site and in other locations—have evolved to integrate, for example, school-based management, mental health and family welfare services, case management, mentoring, and preparing students for work and for life.[33]

Practical guides have been developed to help interested schools and communities get started, build a range of services, collaborate with government and private sector agencies, staff programs, involve parents, find funding, and work effectively in rural and urban settings.[34] The Institute for Educational Leadership has published a guidebook to help state policymakers develop and promote a vision for improving student learning that incorporates the critical role of families and communities as well as schools.

The guidebook will ensure that all state policies and programs focus on supporting student learning and make targeted investments in community schools to increase the effectiveness of existing programs and resources.[35] The U.S. Departments of Education, Health and Human Services, and Justice have collaborated to implement a Safe Schools/Healthy Students initiative that provides funds for local education agencies to support safe and drug free school programs, school and community mental health services, early childhood psychosocial and emotional development services, and education reform.[36]

To further support such efforts and improve social outcomes, the Leave No Child Behind Act provided nearly $1 billion in FY2002 to help establish 21st Century Community Learning Centers.[37] These Centers are designed to provide resources to local education agencies, community-based organizations, other pubic or private entities, or a consortium of two or more such agencies to provide services during non-school hours or periods when school is not in session (such as before and after school or during summer recess).

The Centers are intended to provide academic enrichment activities to help students meet state and local academic achievement standards in core academic subjects, such as reading and mathematics. They also offer students a broad array of additional services, such as youth development activities, drug and violence prevention, and counseling, art, music, recreation, technology, and character education programs that reinforce and complement the regular academic programs. And, they offer families of students served by such centers opportunities for literacy and related educational development.

Such programs can be effective. For example, one intervention that helped teachers develop cooperative class management and instructional methods, helped parents develop child behavior management skills, and helped students develop social competence skills also succeeded at increasing student commitment and attachment to school. It decreased school misbehavior and increased academic achievement.[38] Further, when these students were assessed at age 18, they reported fewer episodes than control students of heavy drinking, violent delinquent acts, sexual intercourse, multiple sex partners, and pregnancy or causing pregnancy.

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A modern school health program can be a vital part of a full-service community school. It can help achieve positive youth development and other important social, or Type IV, outcomes, as well as the other three types of outcomes described above.

What Can Our Nation and Our School Boards Do?

Modern coordinated school health programs could help schools integrate and attain the four interdependent goals described above as an indispensable means for education reform to improve student performance. Surveys show that school administrators, parents, students, and the public at large want school health programs.[39] Further, businesses and state legislatures[40] increasingly appreciate the benefits of these programs. A recent report from the Institute of Medicine called for the U.S. to improve its school health programs;[41] and a report from the World Health Organization called on all nations to improve such programs.[42]

Coordinated school health professionals—such as nurses, food service directors, health teachers, physical education teachers, and school psychologists—are already in place in many schools.[43] Many state education and health departments already employ staff to help schools implement school health programs, as do many national nongovernmental education and health organizations (NGOs).[44] A wide range of practical models, technical assistance, and fiscal resources are available.[45]

In 1988, the U.S. Centers for Disease Control and Prevention (CDC) established a Division of Adolescent and School Health to help the nation's schools implement coordinated school health programs. Through this Division, CDC *monitors* the prevalence of health risks among students, and the prevalence of school policies and programs implemented to reduce those risks. CDC *applies research* to identify effective policies and programs. It *enables constituents* to help schools implement effective policies and programs. And, it *evaluates* the effectiveness of implemented policies and programs.[46] CDC provides funds for state and large city departments of education and health to help schools in their jurisdictions implement coordinated school health programs.[47] It also provides funds for national education and health NGOs (e.g., the National Association of State Boards of Education [NASBE] and the National School Boards Association [NSBA]) to help the nation's schools implement such programs.[48]

In 2002, the U.S. Department of Education created a new Office of Safe and Drug Free Schools, under a new Deputy Undersecretary of Education. The Office oversees all Department activities related to safe schools, crisis response and homeland security, alcohol and drug prevention, and building strong character and citizenship.[49] In announcing the new Office, Secretary of Education Paige said, "Folding all programs that deal with safety, health and citizenship into one office will enable us to…develop a broad based comprehensive strategy…[and such programs are]…essential if we are to ensure that no child is left behind."

A federal Interagency Committee on School Health helps integrate efforts among a wide range of federal agencies,[50] while a National Coordinating Committee on School Health and an organization called Friends of School Health help integrate efforts among national NGOs that are working to improve school health programs.

Individual local and state school boards, and the national NGOs that represent them (i.e., NSBA and NASBE) will play a pivotal role in determining whether and how the schools they serve will implement modern school health programs as a critical part of education reform designed to improve student performance. School boards can help establish local and state policies that encourage and enable schools to integrate each of the eight components of a modern school health program to attain the four goals outlined above, and to help determine priorities for each component and goal. As part of this process, state school boards could learn about and address the needs of their

local boards, and national NGOs and federal agencies could learn about and address the collective needs of state and local boards. School board organizations at the local, state, and national levels could work with interested partners, such as health and social service agencies, teachers unions, and parent associations, to develop appropriate policies and priorities.

To facilitate such actions, NASBE's Safe and Healthy Schools Project[51] publishes policy guides on important school health issues;[52] maintains a database of state policies related to school health; and provides training and technical assistance to help policymakers develop new, or revise existing, school health policies and programs. It works with NSBA to implement the Healthy Schools Network, which facilitates discussions among interested state board members, state education and health agency staff, and other committed individuals to improve school health programs within and across their states. It maintains collaborative partnerships with other national NGOs to improve school health programs; and it convenes study groups and task forces that bring together policymakers, administrators, and practitioners from different disciplines to address pressing school health issues. Indeed, this special issue of the *State Education Standard* provides an up-do-date reference on pertinent issues and resources.

In sum, if American schools do not coordinate and modernize their school health programs as a critical part of educational reform, our children will continue to benefit at the margins from a wide disarray of otherwise unrelated, if not underdeveloped, efforts to improve interdependent education, health, and social outcomes. And, we will forfeit one of the most appropriate and powerful means available to improve student performance.

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