

Toward a Healthy High Schools Movement: Strategies for Mobilizing Public Health for Educational Reform

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Although research shows that education and health are closely intertwined, health professionals have difficulty using this evidence to improve health and educational outcomes and reduce inequities.

We call for a social movement for healthy high schools in the United States that would improve school achievement and graduation rates; create school environments that promote lifelong individual, family, and community health and prevent chronic illness, violence, and problems of sexual health; and engage youths in creating health-promoting environments. Achieving these goals will require strengthening and better linking often uncoordinated efforts to improve child health and education.

Only a broad social movement has the power and vision to mobilize the forces that can transform educational and health systems to better achieve health and educational equity. (*Am J Public Health*. 2010;100:1565–1571. doi:10.2105/AJPH.2009.186619)

IN 1997, THE WORLD HEALTH

Organization noted, “Schools could do more than any other single institution to improve the well-being and competence of children and youth.”^{1(p1)} Yet in the United States, more young Black men move from high schools to prison than to higher education² and more pregnant young women drop out of high school than graduate.³ In 2007, more than 6 million students in the United States between the ages of 16 and 24 years dropped out of high school,⁴ putting them at risk for lifetime economic, social, and health disadvantage.⁵

In this commentary, we call on public health professionals to contribute to an emerging social movement for healthy high schools that can reverse these dismal statistics, thus offering millions of young people a safer path to healthy and productive adulthood and our nation a road to ending the health and educational inequities that continue to shame us. A healthy high schools movement would seek to improve school achievement and graduation rates; create school environments that promote lifelong individual, family, and community health; and focus on prevention of chronic illness, violence, and problems of sexual and mental health. It would also work to engage youths in creating health-promoting school and community environments.

RATIONALE FOR A HEALTHY HIGH SCHOOLS MOVEMENT

Higher educational attainment leads to better health throughout



Assistant Principal Donya Odom “high-fives” students as they enter the Communication & Arts Media High School building in Detroit, MI. The school will receive needed repairs while being featured on a network makeover reality show expected to air this fall. Photograph by Carlos Osorio. Printed with permission of AP Photo.

the lifespan; at the same time, healthier students, families, and communities have higher levels of educational achievement.^{6–9} As Sen has observed,¹⁰ better health and education enable people to realize their capabilities to be free and productive members of democratic societies. Unfortunately, our nation’s limited support and sectoral approach to education and health care have often prevented us from realizing the benefits of this reciprocal relationship, thus missing an important opportunity to improve school achievement, promote health, and reduce socioeconomic and racial/ethnic disparities in health and education. Moreover, the correct insight that parents also have responsibility for health and education has often led policymakers to focus on individual rather than systemic change.

We call for a revitalized social movement for healthy schools. Our commentary is based on prior reviews and syntheses of the literature from education, public health, and school health^{4,11–23} and on our experiences working in schools and youth programs as researchers and practitioners. Influence from the World Health Organization and other researchers,^{15,16,24} we define healthy schools as educational institutions that are committed to creating curricula, social and physical environments, and social relationships that promote healthy life trajectories for students, families, staff, and communities. We call for a social movement because only such a force can transform schools and health institutions to move beyond their current limitations to advance a vision that can mobilize the diverse constituencies

needed to change policies and practices. Although all levels of education, from preschool to universities, could benefit from a healthy schools movement, our focus is on high schools because most youths are now lost to further schooling at this level^{25,26} and high schools offer high potential for population health benefits.

The public health rationale for healthy high schools is straightforward. First, adolescence is a critical time for the prevention of chronic diseases such as heart disease, cancer, and diabetes.^{27,28} These conditions impose a growing burden on the American population and drive health inequities. Helping young people to develop healthy behaviors and create social conditions that prevent chronic disease could bring lifetime health and economic benefits.²⁹

Second, US high schools face a graduation rate crisis. Nationally, 70.6% of students graduate from high school.²⁶ Although more than three quarters of Asian and White students graduate from high school, American Indians, Blacks, and Latinos all have graduation rates around 50%.^{26,30} Many of the nation's lowest graduation rates are in the largest urban school districts.²⁶ Young people who do not attain high school diplomas suffer a wide range of negative social, economic, political, health, and criminal justice outcomes,^{17–19} setting them up for a lifetime of further disadvantage. Moreover, even young people who graduate often lack the skills to prosper in a changing economy,³¹ showing the importance of considering both the quality and quantity of education.

Third, young people spend more waking hours in school than

anywhere else, making the school environment an important influence on health. Among school conditions that have been associated with poor health and educational outcomes are bullying,³² discriminatory policing and disciplinary procedures,^{33,34} high-stakes testing in which a single test leads to being left back a year,³⁵ promotion of unhealthy food,³⁶ decaying school infrastructures,³⁷ and lack of opportunity for physical activity.³⁸ Low-income and Black and Latino young people are much more likely to experience these adverse conditions, making the experience of schooling a contributor to health inequalities.

BUILDING BLOCKS FOR HEALTHY SCHOOLS

Although healthy schools require a transformation of current approaches to education and health, fortunately, the elements of more comprehensive approaches are well established and have been implemented in a variety of settings. As listed in Table 1, these elements include comprehensive school health programs,^{39,40} school-based health clinics,^{41,42} school food programs,⁴³ sexuality education and pregnancy prevention,^{44,45} special programs for pregnant and parenting adolescents,⁴⁶ substance abuse prevention and treatment programs,^{47,48} violence prevention programs,⁴⁹ mental health programs,^{50,51} and school–community programs.^{52,53} An achievable first step in creating healthier schools is to focus on expanding the reach, quality, and coordination of existing services. Although almost every high school has some of these components, few have all and rarely are they sufficiently integrated to achieve potential synergies.

NEW DIRECTIONS AND PROMISING PRACTICES

A second step in creating healthier schools is to identify new directions and promising practices. We propose a few actions related to each of the broad goals of a movement.

Improvement of School Achievement and Graduation Rates

Because completing high school is increasingly a prerequisite for good health and full participation in society, finding new ways to improve school achievement and reduce socioeconomic and racial/ethnic inequities in graduation rates is a key strategy for improving our nation's health. Among the factors that have been consistently associated with school completion are engagement in school, connection to caring adults, disciplinary procedures that are perceived as fair, and school organization.^{20,21,54–56} Each provides opportunities for health intervention.

School curricula that engage young people in analyzing the issues that matter to them—family, relationships, health and sexuality, social justice, paths to adulthood, and options for food, health care, and employment—can be used to develop the academic skills that young people need and avoid the boredom that drives so many young people from school.²² School health programs, especially those staffed by community-based adults, can offer students the connections to other caring adults that are associated with better school achievement.

In their understandable desire to ensure that schools are safe, many school systems have developed disciplinary procedures that rely on metal detectors, mandatory arrests, routine drug testing,

and “zero tolerance” for infractions.⁵⁷ In some cases, these procedures discourage young people from attending school or lead to the expulsion of students who could succeed in a more nurturing environment.^{58,59} At the same time, few schools have successfully implemented programs to reduce the bullying or discrimination based on gender, race/ethnicity, or sexual orientation that can discourage school completion.⁶⁰ Through their experience in violence prevention and mediation, health and mental health professionals can help schools to develop more balanced and effective disciplinary approaches.

Finally, research shows that most students who do not complete high school drop out in the 9th or 10th grade.^{25,26} Thirteen of the nation's 50 largest school districts lose at least half of all non-completers in the 9th grade,²⁶ an astonishing rate of school failure. Developmentally, young people entering high school are striving for independence, choosing the peers who will become primary in their life, making sense of their sexualities and gender norms, and often traveling to and from school through unsafe neighborhoods. Small learning communities^{61,62} or “freshmen families” are one model for reducing freshman dropout. In these small communities, students become responsible for one another, fostering the development of trust; communal responsibility; safety; social, emotional, and academic support; and healthy communication and relationships. Repositioning absenteeism, truancy, and missed school work from being solely a disciplinary problem to an issue of care can encourage support networks, problem solving, and opportunities to focus on social, sexuality, and emotional needs

TABLE 1—Health Interventions That May Contribute to Improved School Completion Rates

Type of Intervention	Program Activities	How the Intervention Contributes to Goals
Coordinated school health program	Health education; physical education; health services; nutrition services; counseling, psychological, and social services; healthy school environment; health promotion for the staff, family, and community; partnerships	Teaches decision-making skills for better life choices; reduces absenteeism; offers early intervention and referrals for problems involving learning, psychological factors, substance abuse, and mental health; makes schools more engaging; connects students to caring adults; engages families and communities in lives of young people.
School-based health clinic	Primary and preventive health care; referrals; assistance in finding health insurance and health care for family; reproductive health services; mental health counseling	Reduces family health problems; offers early intervention and treatment of psychological and physical health problems that can interrupt schooling; reduces adolescent pregnancy.
Dental, vision, and hearing program	Dental, vision, and hearing screenings, services, and products	Enhances educational ability of students so they can see, hear, and not be distracted by toothaches.
School food program	Provision of healthy, affordable food; removal of unhealthy food from vending machines and cafeterias; may include community gardens, farm-to-school activities	Contributes to healthier eating, prevents obesity, reduces future risk for chronic diseases.
Mental health program	Assessment and early intervention for young people with psychological, learning, or behavioral problems; referrals for children and families; counseling; staff training	Prevents problems that can interfere with school from becoming more serious; connects young people to caring adults; makes school more engaging; provides counseling or referrals for family mental health problems.
Substance abuse prevention and treatment program	Alcohol, tobacco, and drug use prevention education; peer education; early intervention for drug users; support for young people with substance-abusing parents; referrals for drug treatment or counseling	Reduces or delays onset of heavy alcohol or marijuana use; offers young people with a drug-using parent a source of support; makes school more engaging.
Sex, HIV infection, and pregnancy prevention programs	Sex education; HIV infection prevention services; referrals for reproductive and sex health services; birth control; peer education; sexually transmitted infection prevention	Reduces or delay adolescent pregnancy; connects young people to caring adults or peers who encourage healthy behavior.
Services for pregnant and parenting adolescents	Child care; parenting education; reproductive health services; continued participation in high school academics and courses	Encourages and supports adolescent mothers to continue schooling; delays second pregnancy.

Continued

that are often barriers to the ability to engage in classroom activities.⁶³ Health professionals can serve as key members of these learning communities.

Creation of Schools That Promote Individual, Family, and Community Health

As enduring institutions that serve most young people and their families in every community, schools have great potential for health promotion. Given the importance of adolescence as a time for shaping lifetime health, especially for disadvantaged youths, schools can play a lead role in reducing health inequities. Some approaches that warrant examination are to use schools as sites for identifying family health problems, to link schools with community health care networks, to use schools as catalysts for creating healthier community environments, and to make schools centers for psychological and reproductive health and comprehensive sexuality education. Several innovative programs have demonstrated success in bringing together services, linking schools and communities, and engaging parents.^{64–66} These warrant further attention and replication.

With their ongoing relationships with young people, high schools are a place where adults can identify youths and families with such diverse problems as learning disorders, obesity, pregnancy, mental health and substance abuse problems, chronic diseases such as asthma and diabetes, and vision and hearing problems. Although adolescents are healthier than are other age groups, many young people fail to get treatment for health problems.⁶⁷ Finding better ways for schools to focus on underlying health problems while

TABLE 1—Continued

Violence prevention program	Peer education and mediation; anger management; conflict resolution; violence prevention education; psychosocial services; individual and group counseling	Makes young people feel safer in school; makes school more engaging; connects young people to caring adults or peers who encourage healthy behavior.
School climate	Policy changes to reduce stigmatization, bullying, aggressive policing, or punitive disciplinary measures; peer education; increased opportunities for close adult-student interactions	Improves student engagement in school activities; connects young people to caring adults; reduces bullying, stigmatization, and distrust of authority.

Source. Modified from Freudenberg and Ruglis.^{39(m)}

still protecting confidentiality and privacy are daunting challenges. School-based health centers already play this role, but to fully realize this potential, they need to expand to more schools, move beyond serving only those who walk through their doors, and better link with community health providers.⁶⁸ Expanding the role of the school nurse is another option that builds on existing resources.⁶⁹

To have an impact on population health, schools need to connect young people with identified problems to services. Establishing or expanding existing partnerships among schools and community health centers,⁵² linking schools more systematically to community health care resources, and creating systematic electronic and other information exchanges between schools and health care institutions can help schools to play a stronger role in prevention.

The nation's more than 23 000 public high schools can become a resource for health promotion. Most high schools have fitness facilities or sports fields that are idle during evenings, weekends, and summers. Recent innovations in school food programs such as school-based farmers markets, school–community agriculture

projects, farm-to-school programs, and community cooking classes show that schools can become centers for community change.³⁸ Similarly, many schools already provide sexuality education and adolescent parenting services and dispense contraceptives, but these programs are often uncoordinated, embattled, and lack the resources to reach all young people.⁷⁰ Expanding the scope and improving the quality of these services can help to improve women's health and reproductive health.

Engagement of Young People in Creating Healthier Schools

The largest untapped resource for improving school and community environments is the energy, imagination, and expertise of young people themselves. Engaging youths in improving education, health care, and health promotion provides new opportunities for experiential education and the preparation of citizens who can contribute to solving the nation's social problems. Linking schools, families, and communities can create new momentum for social and political change. Among the approaches that have been tried are service learning,⁷¹ participatory

action research,⁷² peer education and counseling,⁷³ and youth advisory boards or councils. By weaving these strategies into the fabric of healthy schools, it may be possible to reimagine schools that are youth friendly as well as educationally sound. Among the school policies and programs that could benefit from investigation by young people are disciplinary rules, student services, health and sexuality education, substance use services, and promotion policies. Although adults need to make final policy decisions on many of these issues, bringing the voices of youths into the decision-making process benefits all.

TOWARD A SOCIAL MOVEMENT

Schools—and other social institutions—change in at least two ways. First, the daily practice of policymakers, teachers and staff, young people, and parents yield ongoing incremental reforms. As we have seen, thousands of schools, health institutions, and professionals are now working to improve school health services and better link educational and health systems. Although it needs better coordination, more

systematic evaluation, and more financial support,^{23,74} this work is necessary but not sufficient for realizing the potential for creating healthier schools.

In our view, to achieve that aim also requires a movement for healthy high schools. Social movements are groups of individuals and organizations that work inside and outside established political institutions to redress grievances, change policies, and achieve justice.⁷⁵ In the last century, many significant advances in public health resulted from the civil rights, women's, environmental, and AIDS movements.⁷⁵

Both education and health are the responsibility of established systems that have a stake in the status quo, few linkages for policy coordination, and difficulty in articulating or implementing transformative changes. In the United States, both systems are under attack for failing to achieve their stated goals and costing too much, despite the chronic underfunding of schools and communities most in need. To expect these embattled systems to define and implement a vision of healthier schools seems unrealistic. But if creation of a movement is needed to play this role, from where will such a movement emerge? And how can public health professionals play a role in its birthing? Table 2 lists some specific actions health professionals can consider, as described in this commentary.

Movements emerge from existing mobilizations of people when grievances are perceived, windows of policy opportunity are open, an infrastructure to sustain a movement is in place, and issues are framed to attract attention. A movement for healthy schools has as its foundations current campaigns for educational and health

TABLE 2—Roles for Health Professionals in a Healthy High Schools Movement

Goal	Possible Activities
Improve school achievement and graduation rates.	<p>Join local and regional dropout prevention councils.</p> <p>Create forums in which local and state educational and health professionals and officials can identify and solve problems.</p> <p>Document impact of various health problems such as adolescent pregnancy, substance use, and mental health problems on school achievement and completion.</p> <p>Synthesize and summarize existing research findings on school achievement and health for political and educational policymakers.</p> <p>Document impact of disciplinary procedures and policing strategies on health and school achievement.</p> <p>Evaluate dropout prevention interventions to identify successful models and pathways by which they achieve results.</p> <p>Support parent, community, and youth organizations working to improve school achievement and completion.</p>
Create schools that promote individual, family, and community health.	<p>Develop and evaluate innovative policy and programmatic approaches to school health and sexuality education.</p> <p>Support and advocate for increased and more stable funding for school-based health centers.</p> <p>Establish and evaluate improved services for parenting adolescents and for students with family members with chronic conditions.</p> <p>Develop health, community, and school food councils that advocate for healthier school food.</p> <p>Train health professionals who can work across health and education systems.</p> <p>Defend sexuality education and reproductive health services against ideological attacks and aid in the development of comprehensive health and sexuality education curricula.</p> <p>Advocate for policies that remove unhealthy commercial interests (e.g., beverage companies) from schools.</p> <p>Establish and evaluate partnerships to bring students and their families into community health services.</p> <p>Oppose local, state, and federal budget cuts that endanger the well-being of young people or exacerbate educational or health inequities.</p>
Engage young people in creating healthier school and community environments.	<p>Establish youth leadership development programs in health facilities and universities.</p> <p>Train young people to be community-based health researchers.</p> <p>Create or support youth participatory action research projects on school–health nexus.</p> <p>Develop work, study, internship, and apprenticeship options for young people in school and community health programs.</p> <p>Expand, strengthen, and evaluate peer health programs.</p> <p>Assist young people to bring policy agenda on schools and health into political arena.</p>

disciplinary actions, academic achievement, and school completion. Public health researchers need to do a better job of explicating these pathways.

Second, a movement for healthy schools needs to expand the time frame in which policymakers consider the benefits of healthier schools. Reducing dropout rates, preventing chronic diseases, and improving the environment of schools cost money in the short run, but the benefits are returned over several decades in the form of better health, more productive citizens, and lower health care costs. Convincing decisionmakers to make these investments will require overcoming the current demand for short-term returns. A movement can teach funders and policymakers that the time it takes to improve adolescent outcomes and to make organizational changes in schools is often longer than grant, budget, or political cycles.

Furthermore, throughout history, young people have often been involved in mobilizing major social movements and creating policy change. Health professionals can prepare young people to play these leadership roles, advocate for their voices in relevant policy processes, and help them to do the research needed to make their case.

Advocates of improved school health also need to make clear that the goal is not simply to outpost more health programs in more schools. With schools increasingly strapped with mandates and sanctions focusing on accountability and testing, it would be a mistake to view health as one more unfunded mandate to impose on schools. Moreover, bringing a new sector into schools can have unintended consequences. For example, outsourcing school

care reform, especially those focusing on equity issues. School dropout is a particularly salient issue to mobilize the civil rights, educational, business, health, and other sectors.¹⁹ In these sectors, the movement’s base already exists in the hundreds of thousands of current school and community

health programs, students, professionals, and activists engaged in healthy youth development.

Framing the issues in a way that can move diverse sectors into action is a key task. Several factors seem critical. First, to win the support of educators, any transformation must better link health

and educational outcomes. Some evidence shows that healthy students learn better than unhealthy ones,⁷⁶ but to convince schools to assume a role in students’ health will require showing them that doing so will improve outcomes that matter to them: school attendance (a source of funding),

safety to police departments has, among other things, criminalized low-income youths and youths of color and contributed to what some have labeled the school-to-prison pipeline.⁷⁷ Rather, our goal is to encourage the health and educational systems to engage in a dialogue on how they can better meet their mandates together than separately. Mobilized constituencies of young people, parents, and advocates can help to persuade reluctant bureaucrats in both systems that new, more integrated approaches are needed.

CONCLUSIONS

A healthy high schools movement can contribute to improved population health in 3 ways. First, it can help to increase school achievement and graduation rates. Second, it can assist in the creation of schools that promote individual, family, and community health; prevent the onset of chronic diseases; and reduce risks from substance use, sexual behavior, unhealthy diet, and violence. Finally, it can engage young people in creating healthier environments, policies, and institutions, thus tapping the unrealized social and human capital that young people offer. Such a movement would also serve as a pipeline to future occupations in the human and health services. By achieving these goals, a healthy high schools movement has the potential to contribute to reductions in educational and health inequities—enduring problems that undermine democracy, economic development, and social justice. ■

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