



ELSEVIER

 JOURNAL OF
 ADOLESCENT
 HEALTH

www.jahonline.org

Commentary

Let Schools Do It! Helping Schools Find a Role in Cancer Prevention

Linda L. Morse, R.N., M.A., C.H.E.S.*

American School Health Association, Bethesda, Maryland

Keywords: Cancer prevention; Health education; National health education standards; Health education assessment project; Common core state standards; Health literacy

A B S T R A C T

Health, in its purest sense, is not the primary mission of the nation's K–12 schools, so why should schools feel obligated to address cancer education? The nation's educators are under tremendous pressure to prepare students to pass tests in English language arts and mathematics. As a result, health education and physical education are often assigned third-class status in many of the nation's schools, despite numerous studies supporting the connection between health and academic achievement. Is there a place for cancer prevention education in today's K–12 schools? This commentary explores existing structures that affect cancer prevention education and offers suggestions to improve K–12 health education initiatives.

© 2013 Society for Adolescent Health and Medicine. Open access under [CC BY-NC-ND license](#).

"An education system isn't worth a great deal if it teaches young people how to make a living but doesn't teach them how to make a life." —Anonymous

"Let schools do it!" We have a bullying problem—schools can handle that. Teen pregnancy is a major issue—schools should teach abstinence. Children are overweight—schools should watch what students eat, sell only healthy foods in the cafeteria, and eliminate Parent-Teacher Association bake sales. Kids need physical activity, so just find a few minutes in every classroom for kids to dance around; there is no time for physical education or recess. School-based programs have become the "treatment" for just about every societal problem from gambling to texting while driving. Every "critical" issue wants time on the schedule or calendar and a place in the school curriculum. If there is grant money attached to an issue, chances are it will gain momentum until the funds run dry. Same goes for mandated issues: when a law first passes requiring schools to teach a topic, schools frantically search for whatever it takes to comply.

It is time to stop the "Let-Mikey-do-it" approach and engage in some serious discussion about what schools can and cannot do to improve the health of America's students. Health, in its purest

sense, is not the primary mission of the nation's schools, so why should schools feel obligated to include cancer education in the curricula? Let's start with a look at what is happening in schools.

Schools are under great pressure to prepare students to pass "the test." Principal and teacher evaluations (and thus job security) may be tied to test results. English language arts, reading, and mathematics are taught to the exclusion of nontested subjects such as health education, physical education, and the arts. Schools are rated on the basis of student test scores—schools that need improvement are sanctioned and subject to personnel changes, reconfiguration, or even closure. As a result, in some schools health education may not even be on the radar screen. Health education was not a core academic subject under the No Child Left Behind Act and unless legislators include it in the reauthorization of the Elementary and Secondary Education Act, it will continue to have third-class status in education circles.

In *Health Education: Always Approved but Still Not Always on Schools' Radar* [1], the authors explore more than 50 years of studies and reports on school health initiatives and conclude that many barriers from 50 years ago (e.g., funding, hours in the school day, teacher preparation) are still relevant today. Education and public health officials must collaborate to support quality school health programs that meet the changing needs of today's youth [1]. Similarly, in a recent article in *Education Week* [2], Jane Isaacs Lowe, a senior program officer at the Robert Wood Johnson Foundation said:

Publication of this article was supported by the Centers for Disease Control and Prevention.

The author reports no potential conflicts of interest.

* Address correspondence to: Linda L. Morse, R.N., M.A., C.H.E.S., at lapd8082@gmail.com.

It can be tempting to think that health and education are separate issues given that these two systems often exist in silos. But evidence has shown that when it comes to the success of our children, both are equally important.

Education and health are interdependent systems, with health status impacting academic achievement and academic status impacting health in childhood and adulthood [1]. This concept is not new. In 1918, the *Cardinal Principles of Secondary Education* [3] established that the purpose of schooling was to enable individuals to better themselves and society. According to the book, health was the first and main objective of education, even before reading, writing, and arithmetic. Commenting on the *Cardinal Principles*, noted education consultant Grant Wiggins [4] says:

It's a bit startling to see health first on the list, ahead of readin', writin' and 'rithmetic isn't it? But that shock is also a helpful reminder of how much schools have lost their way. What could be more important in moving into adulthood than learning how to lead a healthy life, in the broadest sense?

In 1990, John R. Seffrin [5], now the chief executive officer of the American Cancer Society, wrote:

When it is effective, comprehensive school health education maximizes the prospect that students will be able to make health-enhancing decisions which allow them to live artfully, to grow and develop naturally, and ultimately, to become fulfilled human beings. To foster this ultimate end is the raison d'être of the place we call school.

Despite such support, most states require less than one credit in health education during the four years of high school [6]. In comparison, most high schools require four credits in English language arts and at least three credits each in mathematics and science [7]. The length of the school day or school year does not change to accommodate these increased demands for more mathematics, science, or technology—schools simply eliminate some requirements and reduce electives to make room. Students who struggle are placed in “test prep” classes and may be pulled from a music, art, health education, or physical education class to remediate in another subject.

A 1-year health education course (or a quarter course each year) must address many topics viewed as important for the well-being of adolescents: prevention of alcohol, tobacco, and other drug use; prevention of HIV, sexually transmitted disease, and teen pregnancy; mental health; nutrition; driver education and road safety; first aid; violence and bullying prevention—the list goes on and on. Grades 5–8 (the middle grades) usually have no credit requirements. Middle schools may use cycled scheduling in which noncore subjects (e.g., music, art, dance, health education, physical education) are taught once every 6 days. It is entirely possible that a student in grade seven might participate in a health education class less than 30 times per year.

Health education teachers are inundated with well-intended research-based programs that do not acknowledge these real-world constraints. When I was a novice teacher, my school district purchased a health education kit containing lesson plans, materials, videos, and parent education materials. Although the program itself was easy to implement, it required 30 lessons at each grade level on one health topic. Accounting for holidays, assemblies, and early dismissals, my seventh grade students had only 24 health education classes during that school year. In such situations, teachers become less concerned about the “research-

based” curriculum and more concerned about covering what is required by the state or local school district. Because of these time constraints, student assessment becomes a series of true-false or multiple choice tests or poster projects rather than planned, meaningful assessments that inform teachers whether students understand and can apply the health concepts that were taught.

Who decides what gets taught? In 1995, with funding from the American Cancer Society, *National Health Education Standards: Achieving Health Literacy* (NHES) was released. The standards were designed to help students acquire the knowledge and skills to promote personal, family, and community health [8]. State education departments and local school districts either adopted the national standards or used them to develop their own state or local standards. Updated in 2007, the standards provide a framework for aligning curriculum, instruction, and assessment practices. The standards also describe the knowledge and skills students should have and be able to achieve; however, the standards leave how this will be accomplished to teachers and other local specialists who formulate, deliver, and evaluate curricula.

State and local education agencies play a critical role in deciding what gets taught because decisions are most often based on the state's standards and graduation requirements and who teaches health education is based on state teacher certification requirements. For example, legislative mandates in New Jersey stipulate that schools must address accident and fire prevention; breast self-examination; cancer awareness; bullying; domestic violence and gang violence; alcohol, tobacco, and other drug use prevention including the use of anabolic steroids; Lyme disease prevention; organ donation; sexual assault prevention; suicide prevention; and stress abstinence from sexual activity [9]. These mandates drive the content of state standards and thus dictate what gets taught in health education classes in New Jersey's public schools.

The Centers for Disease Control and Prevention (CDC) played a critical role supporting quality school health education. CDC funded state and local education agencies for HIV prevention and expanded funding to support healthy eating and physical activity as well as tobacco use prevention. However, the continuation of funding to education agencies is in jeopardy. The *Characteristics of a Quality Health Education Curriculum* [10] and the *Health Education Curriculum Analysis Tool* [11], both CDC documents, provide valuable information to teachers and curriculum developers about the science of health education. However, CDC's emphasis on HIV prevention, tobacco use, healthy eating, and physical activity may have inadvertently narrowed the content taught in some of the nation's schools. Similarly, funding from the U.S. Department of Education focused on preventing alcohol and drug use, improving school safety, and preventing violence as well as and character education [12]. The U.S. Department of Education also coordinates a competitive grant program, the Carol M. White Physical Education Program, which supports physical activity and physical education programs in public and private schools and at community organizations that serve young people [13]. In addition, the U.S. Department of Agriculture provides training grants to state agencies to support nutrition education programs in schools [14]. Although well-intended, these somewhat disconnected federal programs perpetuate the many silos connected with school health. Is it any wonder that school districts compartmentalize health education by funding stream or content? However, without these important

funds and resources, health education might be completely eliminated from the nation's schools.

Another key project, the Health Education Assessment Project (HEAP) sponsored by the Council of Chief State School Officers, focused on aligning curriculum, instruction, and assessment to improve health education instruction. HEAP recognized the need for cross-disciplinary instruction by emphasizing the value of using literature to support instruction in health and reading. Unfortunately, because of cuts in federal and state funding, by the end of the project, less than 18 states and two large school districts were participating in HEAP [15].

Resources for health education continue to dwindle while national and state support for the Common Core State Standards (CCSS) takes precedence. The CCSS were developed under the sponsorship of the National Governor's Association and the Council of Chief State School Officers and released in June 2010. The mission of the CCSS [16] is:

To provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. With American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy.

The CCSS were adopted by 45 states and focus on English language arts and mathematics. For high schools, the English language arts standards were translated into literacy standards in social studies, science, and technical subjects. Health education is never explicitly mentioned in the CCSS, yet many of the identified skills (e.g., understanding domain-specific words, examining evidence) are critically important to health literacy. Will the CCSS prompt teachers of English language arts to connect with health education? Will health education teachers be held accountable for the CCSS? What effect will the CCSS have on health education and other nontested subject areas? Will health literacy be viewed as critical to the development of students who are college and career-ready? Only time will tell.

If we simply mandate cancer prevention education, it can easily become another "disease of the month" approach. Is it really important for all students to know how cancer cells proliferate and the myriad of treatments for cancer? The Partners in Health Sciences Program thought this approach had merit. Partners in Health Sciences Program focused on training teachers of health education and science to take a different approach to the study of cellular biology [17]:

Cancer education encompasses much more than cancer prevention education and includes different aspects of cancer biology from the cell to the organism levels of biological organization. Selected topics in cancer biology can be used to motivate K–12 teachers and students to learn more about basic normal biology while simultaneously learning about cancer. In addition, the psychosocial impact of cancer on the individual, the family, and the community can be used to foster K–12 student interest in studying behavioral science [17].

Viewed through a scientific lens, the authors found many cancer-related topics in biochemistry, immunology, virology, genetics, cell and molecular biology, molecular genetics, and environmental toxicology can be used by K–12 teachers to

increase students' interest in and knowledge of normal biology and its relationship to cancer biology. Burns and Lindsey state that:

... the general topic of "cancer" can serve as an entrée to engage student interest in behavioral science content, for example, the emotional crisis for the patient and his or her family when a diagnosis of cancer occurs, coping with cancer, end-of-life issues, and depression [17].

Should schools use this approach to teach all students about cancer? Are science teachers adequately trained to provide this level and type of instruction? Will such courses be made available to all students or only those who are academically talented? Who will provide instruction and guidance on the social-emotional aspects of cancer? Are health and science teachers interchangeable? I think not.

So, what should schools do? We cannot prevent teenagers from texting, tweeting, and using technology. Rather than focusing on the biologic aspects of cancer education, perhaps schools should educate young people to evaluate the health information they find on the Internet. As health professionals, we often shudder at the misinformation that is only a click away. We know that teenagers turn to other teenagers for health information and advice. When they need to make health-related decisions, teenagers need to be able to communicate effectively, negotiate when necessary, and sometimes just say no. Teenagers need to set and achieve health-related goals, some that have an immediate effect and some that will affect them during adulthood. Teenagers need to learn how to deal with everyday stress, thus reducing their likelihood of engaging in risk-taking behaviors. Teenagers need to be empowered to advocate for their personal health and to act responsibly on the basis of sound health information. This skill-based approach, supported by the NHES, requires time and practice but addresses a myriad of health problems, not just cancer prevention, and aims to develop students who are "health literate." Unfortunately, in most of today's middle and high schools, time for health education is minimal at best and marginalized for certain, leading many health education programs to focus on content and forego skills. Swapping skills for content is not an even trade.

The concept of teaching skills rather than content is based on a simple Chinese proverb: Give me a fish and I eat for a day. Teach me to fish and I eat for a lifetime. Teaching skills is what health education is all about, whether we are trying to prevent cancer or HIV, supporting healthy eating, or learning how to have healthy relationships. Piece by piece, we aim to develop healthy individuals who are ready to pursue a career or go to college, who are health literate, and who take responsibility for their own health.

Cancer prevention, therefore, needs to be less about cancer and more about personal responsibility for healthful behavior. Prevention needs to be more about teaching the skills that empower young people to make health-enhancing decisions. Cancer prevention then becomes part of the fabric of the school and not just something taught in a one-credit health education class or an advanced biology class.

What can schools do to educate young people about cancer risks? How would your child's school respond to the following questions?

1. Does the mission of the school and district address student health and well-being? How does the school address the

- needs of the whole child? What policies and practices address the social, emotional, and physical needs of students [18]?
2. Does the school consistently provide formal and informal health education that includes current, accurate, and useful functional health information; ample opportunities to develop the skills necessary to adopt, practice, and maintain health-enhancing behaviors; and instruction that builds personal competence, social competence, and self-efficacy? Is health literacy recognized as an important part of the instructional “core”?
 3. How does the school or school district ensure that school policies and practices support the concepts and skills taught in health education classes (e.g., serving healthy foods, providing recess, allowing the use of sun block)? Are health messages clear and consistent?
 4. Does the school enable and empower students to make critical personal health-related decisions by providing support services such as counseling, school nurses, and health clinics and providing open access to Internet resources related to adolescent health?

The American Cancer Society (ACS) laid the groundwork for the NHES, trained teachers across the country on implementing the NHES, and took the lead in promoting coordinated school health initiatives nationwide. Initially, these efforts may have been about cancer prevention; however, ACS also focused on leadership in health education and coordinated school health, and promoted health literacy and an active lifestyle for every student. As further demonstration of its leadership in school health, the ACS partnered with the American Heart Association and the American Diabetes Association to issue a joint statement in support of school health education: *Health Education in Schools: The Importance of Establishing Healthy Behaviors in Our Nation's Youth* [19]. The joint statement makes a compelling case for school health education:

The health and well-being of our nation's young people is not a matter of luck. It is not a chance or random event. It must be a planned outcome. The case for well-designed, well-resourced, and sustained health education in the nation's schools is compelling.... It is easier and less costly to keep our children healthy than to fix preventable health problems later in life.

Instead of public health officials, legislators, and researchers shouting “Let schools do it,” maybe the battle cry should be the frequently used acronym TEAM: Together We Achieve More. Let us not compete for precious time and resources but work together to provide young people with meaningful educational experiences to help them become responsible and health literate and, at the same time, help prevent cancer. Let us advocate for the inclusion of health education as a core subject—perhaps health education is *the* core subject that is missing from academic success. Former Surgeon General Carmona said it well: Health literacy can save lives, save money, and improve the health and well-being of millions of Americans ... [20]. Our mission as educators, public health officials, and researchers should be to develop a generation of health-literate people who are prepared for the challenges of life: college, career, family, and community. Coordinated collaboration between professionals in

education and public health can better prepare our young people to be health literate and cancer-free.

Acknowledgments

This article is purely the opinion of the author and does not represent the view of the American School Health Association.

References

- [1] Mayer AB, Smith BJ, McDermott RJ. Health education: Always approved but still not always on schools' radar. *Am J Health Educ* 2011;42:356–9.
- [2] Lowe JI. Want to boost learning? Start with emotional health. *Educ Week* 2011;31:40.
- [3] National Education Association of the United States. Commission on the Reorganization of Secondary Education. Cardinal principles of secondary education: A report of the Commission on the Reorganization of Secondary Education. p. 35. Washington, DC: Government Printing Office; 1918. Available at: http://www.archive.org/stream/cardinalprincip100natiuoft/cardinalprincip100natiuoft_djvu.txt. Accessed December 15, 2011.
- [4] Wiggins GA. Diploma worth having. *Educ Leadership* 2011;68:28–33.
- [5] Seffrin J. The comprehensive school health curriculum: Closing the gap between state-of-the-art and state-of practice. *J Sch Health* 1990;60:151–5.
- [6] Centers for Disease Control and Prevention (CDC). School health profiles. 2010. Atlanta, GA: CDC; 2011. Available at: <http://www.cdc.gov/HealthyYouth/profiles/>. Accessed December 15, 2011.
- [7] State College and Career-Ready High School Graduation Requirements. Washington, DC: Achieve, Inc; 2011. Available at: http://www.achieve.org/files/22_CCR_Diploma_Full_Reqs_Table-12-2011.pdf.
- [8] Joint Committee on National Health Education Standards. National health education standards: Achieving excellence. 2nd ed. Atlanta, GA: American Cancer Society; 2007.
- [9] New Jersey Department of Education. New Jersey core curriculum content standards for comprehensive health and physical education. 2009. Trenton, NJ: New Jersey Department of Education; 2010. Available at: <http://www.state.nj.us/education/cccs/standards/2/index.html>.
- [10] Centers for Disease Control and Prevention (CDC). Characteristics of an effective health education curriculum. Atlanta, GA: CDC; 2011. Available at: <http://www.cdc.gov/healthyyouth/sher/characteristics/index.htm>.
- [11] Centers for Disease Control and Prevention (CDC). Health education curriculum analysis tool. Atlanta, GA: CDC; 2011. Available at: <http://www.cdc.gov/healthyyouth/hecat/index.htm>.
- [12] U.S. Department of Education (USDE). Office of Safe and Healthy Students. Washington, DC: USDE. Available at: <http://www2.ed.gov/about/offices/list/oese/oshs/index.html>.
- [13] U.S. Department of Education (USDE). Carol M. White Physical Education Program. Washington, DC: USDE. Available at: <http://www2.ed.gov/programs/whitephysed/index.html>.
- [14] U.S. Department of Agriculture (USDA). Team nutrition. Washington, DC: USDA; 2012. Available at: <http://www.fns.usda.gov/tn/Default.htm>.
- [15] Council of Chief State School Officers (CCSSO). State Collaborative on Assessment and Student Standards: Health education assessment project. Washington, DC: CCSSO. Available at: [http://www.ccsso.org/Resources/Programs/Health_Education_Assessment_Project_\(HEAP\).html](http://www.ccsso.org/Resources/Programs/Health_Education_Assessment_Project_(HEAP).html).
- [16] National Governors Association (NGA). Center for Best Practices, and Council of Chief State School Officers. Common core state standards. Washington, DC: NGA; 2010. Available at: <http://www.corestandards.org>.
- [17] Burns ER, Lindsey M. Cancer education and cancer prevention education for K-12 students and teachers. *J Cancer Educ* 2004;19:105–10. Available at: http://pulse.pharmacy.arizona.edu/resources/skincancer/cancer_education.pdf.
- [18] ASCD. The whole child. Alexandria, VA: ASCD. Available at: <http://www.wholechildeducation.org/about/>.
- [19] American Cancer Society (ACS), American Diabetes Association (ADA), American Heart Association (AHA). Health education in schools: The importance of establishing healthy behaviors in our nation's youth. Atlanta, GA: ACS, ADA, AHA; 2008. Available at: <http://www.aahperd.org/aahe/advocacy/positionStatements/upload/statement-ACS-AHA-ADA.pdf>.
- [20] Bohlman L, Panzer A, Kindig D, eds. Health Literacy: A Prescription to End Confusion. Washington, DC: Committee on Health Literacy, Board on Neuroscience and Behavioral Health, Institute of Medicine of the National Academies; 2004.