Engaging Students in Community Health: A Public Health Advocacy Curriculum

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Individual risk assessment and behavior change dominate the content of high school health education instruction whereas broader social, political, and economic factors that influence health—known as upstream causes—are less commonly considered. With input from instructors and students, we developed a 10-lesson experiential Public Health Advocacy Curriculum that uses classroom-based activities to teach high school students about the upstream causes of health and engages them in community-based health advocacy. The Curriculum, most suitable for health- or advocacy-related elective classes or after-school programs, may be taught in its entirety or as single lessons integrated into existing coursework. Although students at many schools are using the Curriculum, it has been formally evaluated with 110 predominantly Latino students at one urban and one semirural public high school in Northern California (six classes). In pre–post surveys, students showed highly significant and positive changes in the nine questions that covered the three main Curriculum domains (Upstream Causes, Community Exploration, and Public Health Advocacy), p *values .02 to <.001. The Curriculum is being widely disseminated without charge to local, national, and international audiences, with the objective of grooming a generation of youth who are committed to the public health perspective to health.*

Keywords: *advocacy; community intervention; health disparities; health education; health promotion; school health; coordinated school health programs; curriculum; social determinants of health*

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BACKGROUND

Health education for high school students often focuses on risk factors and disease outcomes and neglects teaching about the important underlying social, political, and economic factors (i.e., upstream or fundamental root causes) that influence health. In such traditional health education approaches, students may assess personal cardiovascular disease risk by calculating their body mass index and measuring portion sizes in light of their own dietary choices, or discuss the importance of personal bicycle helmet use to prevent head injury. By comparison, a public health approach teaches students about the systemic forces that affect health, such as the proliferation of fast-food restaurants serving large portions of high-fat food and sweetened beverages, or the presence and enforcement of bicycle helmet laws.

Although many high school teachers are interested in expanding the scope of their instruction to include public health messages, relevant curricula and other resources are not widely available. In the peer-reviewed academic literature in the past 10 years, there are few reports of programs that teach about upstream causes of

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health. Among these (those published as well as unpublished), few have produced formal curricula that are publicly available and/or free of charge (California Newsreel, 2008; Gould, Mogford, & DeVoght, 2010). Furthermore, state and national health education standards inconsistently include public health content, and the public health content that is mentioned does not explicitly describe upstream causes or how students can advocate to improve their community's health (Joint Committee on National Health Education Standards, 2007).

METHOD

In response to the paucity of public health curricula and the need to frame health in a broader context, we developed a Public Health Advocacy Curriculum where high school students

1. participate in classroom-based activities to learn about the upstream or root causes of health, (e.g., analyze case studies, watch documentary films, examine local health statistics),
2. conduct school- and community-based research to identify local determinants of health (e.g., use cameras and PhotoVoice research techniques to document assets and barriers to health, such as the presence of a medical clinic or lack of grocery stores selling fresh produce), and
3. become advocates to promote public health policy in their schools and communities (e.g., provide educational presentation to parents and administrators about the carcinogenic effects of Bisphenol-A (BPA) in plastic water bottles, and petition them to provide only BPA-free water bottles or alternative water sources at school or school-sponsored events).

The Curriculum consists of ten 1- to 2-hour participatory lessons that are categorized by the following three domains: Upstream Causes (Lessons 1-4), Community Exploration (Lessons 5-7), and Public Health Advocacy (Lessons 8-10). It was developed with intensive input from teachers from multiple schools, all of whom contributed to the vision of the Curriculum and continually refined lesson content. Table 1 describes lesson content and sample activities.

Theoretical Framework

In contrast to traditional didactic education where only the teacher provides information to students, this Curriculum is experiential and grounded in Freirian pedagogy and project-based learning, where students help direct their own studies and assignments involve exploration. Through inquiry-based activities and real-world projects, students practice academic skills (e.g., critical thinking, problem solving) and directly participate in and reflect on issues that may affect the health of their communities (Freire, 1970; Kolb, 1984).

Many lessons utilize a think–pair–share strategy, in which students first work autonomously (e.g., read an article alone), then conduct small group dialogue (e.g., collectively reflect on their reactions to the article or answer probing questions posed by the teacher), and finally, report back to the larger class for a discussion. This format is often effective for student comprehension as it allows for independent thinking (when students perform separately), collaboration and critical analysis (when students interact with peers and each student is held accountable by serving in roles such as reader, scribe, or reporter), and reinforcement (when teachers summarize and stress key points; Lyman, 1981; Solomon, 2009).

Curriculum Delivery

The Curriculum is intended to be easily adopted or adapted and is not dependent on support from outside instructors; a teacher can implement the Curriculum without conducting prior research or receiving specific training. The Curriculum functions as a resource manual in that each lesson provides a rationale that supports the purpose of each activity, detailed objectives, anticipated outcomes, and step-by-step instructions. Three graphic icons, titled READ, HAND OUT, and Q&A, are imbedded throughout the lessons to help visually direct teachers to key action items. Student worksheets and other resources are provided at the end of each lesson. See Figure 1 for a sample image from Lesson 5.

In addition, a brief video accompanies the Curriculum to orient teachers to its themes, content, and delivery options. The video, which serves as both an informational and instructional tool for those interested in learning about and utilizing the Curriculum, documents students engaged in classroom- and community-based public health activities and interviews students and staff who were involved in Curriculum development or implementation.

Curriculum implementation is most feasible in elective-based courses, where teachers are less bound by the pressures of school, district, or state requirements. Though lessons align with national health education standards (e.g., "Students will demonstrate the ability

TABLE 1
Description of Public Health Advocacy Curriculum

Chapter. Lesson Title	*Content Summary*	*Example of Participatory Activity*
Upstream Causes: Chapters 1-4		
1. Introduction to Health	Provides a comprehensive definition of health	Through case studies, students learn to evaluate mental and physical health issues using a public health lens, one that prioritizes addressing the root causes of health and disease outcomes for populations rather than applying quick-fix solutions for individuals. Students are encouraged to always ask themselves: What is the disease or health outcome in focus? What individual behaviors or risk factors contributed to someone developing the health or disease outcome? What social, political, and/or economic factors may have influenced the behavior choices?
2. Food Availability, Obesity, and Diabetes	Uses activities about obesity and a diabetes case study to illustrate upstream causes of poor health	Students watch a documentary about a Native American tribe with a high rate of diabetes and then describe the corresponding upstream causes pathway. The upstream causes pathways can be illustrated by (a) using a chart with four interconnected boxes—upstream causes, individual behavior choices, risk factors, health or disease outcomes—to describe the pathway from the exposure(s) to the health outcome(s) and (b) using a "root causes tree"—an image of a tree in which root causes (i.e., social, political, and economic factors) of disease are listed on the roots of the tree, risk factors are written on the branches, and health or disease outcomes are written on the leaves.
3. Environmental Hazards and Regulatory Measures	Identifies social, political, and economic factors affecting environmental health, and teaches advocacy writing skills	Students read and evaluate local news articles to identify social, economic, and/or political factors that may contribute to environmental health hazards, such as *E. coli* outbreaks. They then write letters to local civic leaders, government officials, or school administrators to practice an advocacy strategy.
4. Smoking, Drinking, and the Media	Highlights media and corporate influences on health	Students analyze tobacco advertisements and read excerpts from documents written by the tobacco industry that reveal corporate strategies to recruit young smokers. Students review initiatives by the American Legacy Foundation to learn about effective efforts that can counter the powerful influence of the tobacco industry.
Community Exploration: Chapters 5-7		
5. Perceiving Communities Through a Public Health Lens	Prepares students to explore healthy and unhealthy aspects of their schools and communities	Students complete a computer-based educational game that shows how a community can transition from being unhealthy (e.g., discontinuous, cracked sidewalks that may isolate community members and discourage economic development) to healthy (e.g., continuous, paved sidewalks that connect residential and commercial areas and promote social cohesion and may create a stronger economy). Using newspapers and the Internet, students research what advocacy initiatives exist in their own community.

(continued)

TABLE 1 (CONTINUED)

Chapter. Lesson Title	*Content Summary*	*Example of Participatory Activity*
6. Community Assets and Barriers	Leads students through a community-based activity where they photograph, map, or document goods, services, and policies in their schools or local communities that may affect health, and share results with classmates and teachers(s)	In their school or home communities, students document goods, services, and resources that function as assets or barriers to health. Students either photograph their findings or mark them on a map of the geographic region being surveyed using plus signs (for assets) and minus signs (for barriers). For example, students may identify a public service billboard promoting preventative screenings; playgrounds; or parks with functional restrooms as assets. In contrast, they may identify an abandoned lot near school where there is drug activity; smoking and alcohol advertisements on convenience store windows; or broken glass in parking lots as barriers. To supplement student learning, teachers may arrange for students to meet with professionals from public health or city planning departments or health advocates from community organizations.
7. Leveraging Community Assets to Reduce Health Disparities	Fosters reflection about the assets and barriers identified in the previous lesson, Community Assets and Barriers	Students choose an important health issue facing their community, then stand facing each other in a circle and pass a ball of yarn to every classmate, each time suggesting a new strategy that could be implemented to address the health issue; the continuity of ideas and ball of yarn help students recognize that higher level ideas can be generated from teamwork and collaboration.
Public Health Advocacy: Chapters 8-10		
8. Understanding Health and Social Advocacy	Reviews upstream causes and social advocacy; explains how efforts to improve the health of a community take place at the individual, service, and activism levels	Students research volunteer and advocacy projects conducted by others locally or nationally to understand the practical application of individual-, service-, and activism-level efforts that can improve the health of their communities. Students develop ideas from these volunteer and advocacy examples to help develop their own public health projects.
9. From Start to Finish: Health Advocacy Projects	Allows for health advocacy project preparation, implementation, and reflection	Students merge their knowledge of upstream causes of health and observations from community-based field trips to develop a health advocacy project that addresses a specific health issue relevant to their community. Projects require students to initiate a volunteer service activity and propose how to broaden the impact of their service to improve health at a population or policy level. For instance, students may work with school administrators to improve school athletic facilities, open those facilities to community members, or mandate extended physical activity time for students.
10. Upstream Causes and Health Advocacy Review	Reinforces upstream causes and social advocacy from all lessons	Sets of index cards illustrate various health issues. Each card lists an upstream cause, health behavior, or health and disease outcome. Students arrange cards sequentially to show the pathway of how social, economic, and/or political factors influence behavior choices, which in turn affect health and disease outcomes. Using inspirational quotations as a prompt, students reflect on their experiences in classroom activities and community-based projects.

Instructions and Discussion

Follow the instructions below to implement the *Viewing a Community from Multiple Perspectives* activity:

Handout 1

1. **Distribute** the *Who Do You See?* illustration to students or display it to the class using a projector.
2. **Provide** students time to view and interpret the image.

Q&A

3. **Ask** students the following questions:
   a. Who do you see in this image? Does everyone see the same person (older woman or younger woman)?
   b. Just as some of you viewed the image differently, what aspects of a community may some of you view differently, and why?
   c. How might different perceptions of a community affect the health of those living within it, and affect a student's ability to advocate for healthy improvements within the community?
4. **Make** an analogy between viewing an image of the woman and viewing a community; the two perspectives used to interpret this single image on a page are similar to the complexity of perspectives used to judge a community. For example, if a city decides to build a casino, some residents may view the casino as a source of employment, entertainment, and revenue while other residents may fear that it encourages gambling and drinking, and will increase violence and traffic. Both viewpoints are valid; the aim is to seek and respect opinions from both sides of an issue and work together to ensure that health is optimized.

Read

5. **Read** students the following excerpt from Collins O. Airhihenbuwa's book, *Healing Our Differences: The Crisis of Global Health and the Politics of Identity*.

   "Two men went to the cemetery to pay respect to their late wives. The first, an American, had a bouquet of roses; the second, a Nigerian, had a pot of soup. As they knelt side by side in front of their wives graves, the American asked the Nigerian, *'When do you expect your wife to eat the soup?'* The Nigerian responded, *'As soon as your wife begins to smell the roses.'"*

Q&A

6. **Ask** students the following questions:
   a. What is the key message of this excerpt?

   According to Airhihenbuwa, "This anecdote exemplifies two cultural values practiced by two men from two different cultures. Neither practice had any practical significance for the beneficiary [the deceased wife]. However, both practices have such profound cultural value that the practical irrelevance is unimportant. No one culture is more important than another, just different.

Page 8 • Lesson 5:

FIGURE 1 Image of Lesson 5, Activity 2, Page 8

to advocate for personal, family, and community health"; Joint Committee on National Health Education Standards, 2007) and California state education standards (e.g., science standards; investigation and experimentation and health education standards; health promotion; California State Board of Education, 2012), flexible classes are critical. Thus far, implementation has been most successful in those classes, programs, or schools where students are interested in and content is geared toward health; this includes regular health classes, health academies (where students dedicate elective courses to health or health concepts are integrated across disciplines), academic support programs such as Advancement Via Individual Determination, and health-themed charter schools (where all courses, extracurricular activities, and career guidance are geared toward science, health, and medicine). Lessons are also conducive to an after-school or summer format (e.g., student-led clubs or workshops).

Curriculum implementation can take place on a varied time line, either daily or weekly, depending on the structure and needs of the classroom. Ideally, the foundational lessons of Domain 1 (Upstream Causes) that build students' understanding of the upstream causes of health are taught consecutively and/or in a condensed time period. Community-based activities and health advocacy projects in Domain 2 (Community Exploration) and Domain 3 (Public Health Advocacy) can take place over the course of a few weeks, an entire academic year, or as part of multiyear initiatives.

Though it is optimal to teach the Curriculum in its entirety, lessons can be taught independently, thus expanding the scope of potential users. For example, an after-school program supplemented its existing youth HIV/AIDS advocacy syllabus with only Domain 1 activities; through participatory classroom lessons, students who were already interested and active in HIV/AIDS issues deepened their understanding of the complex social, economic, and political factors contributing to the disease, thus bolstering the students' overall efforts and impact. In another example, a high school integrated Curriculum lessons into a cross-disciplinary program taught in core academic classes. Mathematics class students analyzed local health statistics before collecting their own data using the PhotoVoice and mapping activities in Domain 2, and history class students learned how the U.S. civil rights movement of the 1960s informed their own health advocacy projects conducted as part of Domain 3.

The Curriculum can also be modified to match the special needs of a particular classroom or student population. One high school, for instance, faced high rates of teenage pregnancy. Lessons were tailored such that the Upstream Causes framework was described through the context of unplanned pregnancy, and all student projects addressed the topic from different perspectives.

EVALUATION

Data Collection

Although many schools are using the Curriculum, it has been formally evaluated in two high schools in Northern California, one an urban public school in San Jose, California, and one a semirural health-focused charter school in Stockton, California. The Curriculum was implemented in two sophomore academic enrichment program classes (Advancement Via Individual Determination) in the San Jose school and in four freshman health classes in the Stockton school. The teacher from the San Jose school implemented the Curriculum on most days of the week for a 2-month academic unit, and teachers from the Stockton school implemented the Curriculum every week for an entire academic year.

To assess students' knowledge and self-efficacy regarding each of the three Curriculum domains (Upstream Causes, Community Exploration, and Public Health Advocacy), we developed pre- and postsurveys, based on a previously evaluated curriculum, that included a combination of demographic and content-specific questions (questions on knowledge and self-efficacy for each of the three domains; Winkleby, Ned, Ahn, Koehler, & Kennedy, 2009). Students responded to the content-specific questions on a 5-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. To enhance comprehension and the collection of complete data, questions were written for students with low literacy skills and assessed with the SMOG (Simple Measure of Gobbledygook) formula as a measure of fourth-grade level of readability (McLaughlin, 1969). The posttest survey also included open-ended questions.

The study was approved by the Stanford Human Subjects Institutional Review Board.

Results

A total of 110 students participated in the pre–post surveys, 44 at the urban San Jose school and 66 at the semirural Stockton school (Table 2). Both schools served low-income students with approximately two thirds of the students qualifying for the U.S. Department of Agriculture federally assisted National School Lunch Program (U.S. Department of Agriculture, Food and Nutrition Service, 2012). Approximately two thirds of participants were female and two thirds were Hispanic.

TABLE 2
Student Demographics for Urban and Semirural High Schools in California (*N* = 110)

	Urban Public School (San Jose, CA)		*Semirural, Health-Focused Charter School (Stockton, CA)*		*Urban and Semirural Schools Combined*	
	N	%	N	%	N = *110*	%
Grade						
Freshman	0	0.0	66	100.0	66	60.0
Sophomore	44	100.0	0	0.0	44	40.0
Gender						
Male	21	47.7	18	27.3	39	35.5
Female	23	52.3	48	72.7	71	64.5
Ethnicity						
American Indian, Alaska Native, Native Hawaiian, or Pacific Islander	2	4.5	6	9	8	7.3
Asian	6	13.6	4	6.1	10	9.1
Black, African American, or African	0	0.0	5	7.6	5	4.5
Hispanic or Latino	34	77.3	38	57.6	72	65.4
White or Caucasian (non-Hispanic)	0		7	10.6	7	6.4
Other ethnicity	2	4.6	6	9.1	8	7.3
English primary language spoken at home	33	75.0	60	90.9	93	84.5
Highest level of education completed by father						
Less than high school	14	31.8	8	12.1	22	20.0
High school	12	27.3	22	33.3	34	30.9
College and above	3	6.8	6	9.1	9	8.2
Don't know	15	34.1	30	45.5	45	40.9
Highest level of education completed by mother						
Less than high school	16	36.4	5	7.6	21	19.1
High school	15	34.1	23	36.4	38	34.5
College and above	4	9.1	7	10.6	11	10.0
Don't know	9	20.5	31	47.0	40	36.4

Among students who knew their parents' levels of education, approximately 20% of parents had completed less than a high school education and approximately 30% had completed only a high school education.

Results from the quantitative pre- and postsurvey questions were consistent across both schools and are therefore combined (Table 3). Students showed highly significant and positive changes for all of the nine questions that covered knowledge and self-efficacy within each of the three main Curriculum domains (Upstream Causes, Community Exploration, and Public Health Advocacy), with $p < .001$. Most responses improved approximately 1 point on the 5-point Likert-type scale. The largest change was for the item "I know how to identify goods and services in my community that may affect health," which showed an improvement of 1.20 points in both the urban and semirural schools.

Students did not show a statistically significant change about their interest in health or science as a career, though career content was not included in the Curriculum and changes were therefore not expected (data not shown).

TABLE 3
Student Pre- and Postsurvey Responses (*N* = 110)

	Urban Public School (San Jose, CA) and Semirural, Health-Focused Charter School (Stockton, CA)			
Survey Question[a]	*Pretest (*SD*)*	*Posttest (*SD*)*	*Change*	p
I am knowledgeable about public health.	3.63 (0.86)	4.25 (0.61)	+0.62	<.001
Conditions in my neighborhood may influence health as much as individual choices.	3.14 (1.09)	4.08 (0.69)	+0.94	<.001
I can explain how different aspects of my community can influence health.	2.99 (0.93)	3.93 (0.78)	+0.94	<.001
I know how to collect information about health issues that may affect my community.	3.07 (0.86)	3.99 (0.75)	+0.92	<.001
I know how to speak aloud in class about health issues in my community.	2.92 (0.92)	3.82 (0.84)	+0.90	<.001
Students help decide what goes on at my school.	3.34 (1.06)	3.75 (0.99)	+0.41	<.001
I know how to identify goods and services in my community that may affect health.	3.04 (0.95)	4.13 (0.81)	+1.09	<.001
I know how to work with others to improve the health of my community.	3.32 (1.01)	3.86 (0.92)	+0.54	<.001
I know how to create awareness and advocate for change to address health issues that affect my community.	2.91 (0.85)	3.76 (0.82)	+0.85	<.001

a. A 5-point Likert-type scale, ranging from 1(*strongly disagree*) to 5 (*strongly agree*).

Results from the qualitative, open-ended post-survey questions (e.g., How did the advocacy project change the way you think about the health of your community?) indicated that participating in the Public Health Advocacy Curriculum was a positive experience for students as well as teachers. Examples of student responses included the following:

> The Curriculum taught me how to tell the differences from assets and barriers in my community. It also showed me that there are a lot of things we can do individually and as a community to make our community a healthier one.

> The advocacy project really opened my eyes and helped me realize [about] health in my community. It helped me learn [about] the assets and barriers and how serious the health issues in my community are and how I could make a change one step at a time.

> Before the project I didn't really think I could help my community. After seeing all the things me and my classmates achieved, I know I can help in many ways. The way the advocacy project changed the way I think about the health of my community is that I now know that there are many things in my community that have to change and I think it is us who have to change our community to a clean, safe, and healthy place.

Teachers agreed that the Curriculum had a positive impact on their students:

> The interdisciplinary process and real world application embedded within this Curriculum made it the most engaging unit we did all year. Our final product, a proposal and presentation to community members, provided an empowering experience for our students to connect with and impact public health in their own back yard.

DISCUSSION

Results show that our Public Health Advocacy Curriculum, developed to inform high school students about fundamental upstream causes of poor health, can

successfully create change in students' perceptions of how their environment influences health and can engage students in shaping the health outcomes of their communities.

To continue to reach more students and ensure the long-term sustainability of the Curriculum, dissemination is critical. Although many impressive health resources are developed by programs, most are not widely or effectively distributed. To ensure broad use of the Curriculum, we are posting it on high-traffic health and education websites where interested individuals and groups can download lessons free of charge. Posting the Curriculum on these websites will make the Curriculum available to multiple audiences and reduce risk of losing access to the Curriculum should single websites become outdated.

The Stanford Medical Youth Science Program, the precollegiate biomedical academic enrichment program that developed the Curriculum, has posted the Curriculum on its website (http://smysp.stanford.edu/education/phac/phac.html; Winkleby et al., 2009). In addition, several prominent health and education agencies are also posting the Public Health Advocacy Curriculum on their websites at no cost. First, the Career Academy Support Network, which provides free resources to hundreds of teachers who are part of the California Partnership and National Career Academies, has posted the Curriculum on its website. These academies are small learning communities within traditional high schools where students devote additional class time to specific disciplines, such as health (California Department of Education, 2011). Second, the California Newsreel, an organization that produces and disseminates health and social justice films, is posting the Curriculum on its website: www.newsreel.org. Third, we are collaborating with NextGenU.org, the world's first free, accredited, online university. NextGenU.org is augmenting our lessons with additional activities and resources, and will provide access to the adapted version as well as extensive evaluation data. Finally, the federal Office of Minority Health's National Partnership for Action is implementing youth-focused initiatives across the country to address health disparities, and together we are partnering to deliver the Curriculum within their networks (Office of Minority Health, 2013).

In conjunction with online publication, we are also fostering use of the Curriculum among individuals, schools, and organizations, as it is important to secure a cadre of stakeholders who can use and become advocates for the Curriculum. One successful method of outreach has been to identify and follow up with potential Curriculum users whom we meet at educational and scientific conferences. Thus far, we have held in-person trainings and attended classroom implementation sessions to assist San Francisco Bay Area–and Los Angeles–based high schools incorporate the Curriculum into their long-term course plans. We also hosted a webinar for affiliates of the National Partnership for Action to review Curriculum content and discuss how lessons can be customized to the needs of their population. Not only is this a cost-effective means of reaching new audiences but recorded webinars can be accessed by other groups who wish to learn more about the Curriculum, thereby making it a promising, sustainable model for long-distance training. Nationally we have distributed the Curriculum and provided ongoing e-mail and telephone support to over 100 classes, schools, and organizations.

Though our Curriculum is a valuable tool for teaching students about public health, its impact ultimately extends only as far as the classrooms and programs that utilize it. Thus, there is a need at a systemic level to expand traditional, individual-focused high school health education to include public health messages, and we support efforts to do so.

For example, revising state and national health education standards to include community determinants of health is needed. The benefits of broadly incorporating public health in high school health education include: (a) normalizing public health as a regular part of coursework, (b) increasing the demand for public health education and thus spurring the creation of new public health resources, (c) raising awareness among teachers about the importance of communicating how social, political, and economic factors affect health outcomes, and (d) increasing the number of students exposed to and engaged in public health.

Although public health has yet to be integrated in high schools on a large scale, in the past decade there has been a movement to integrate public health into undergraduate college education. Sparked by the 2003 Institute of Medicine report that called for undergraduate institutions to include public health in their standard coursework, professional organizations, universities, and faculty have mobilized as part of a National Task Force to cooperatively develop curricula, assessment tools, and support systems that are bringing this goal to fruition. Many colleges and universities, for example, now offer public health as a major or minor. The Institute of Medicine Report suggests that the knowledge and skills learned in basic public health classes (e.g., introduction to public health or introduction to epidemiology) are transferable to other disciplines and applicable in the real world. It notes that teaching public health to a greater number of undergraduate students can help cultivate an "educated citizenry" that is

equipped with the knowledge and skills to respond to our changing world, health and otherwise (Gebbie, Rosenstock, & Hernandez, 2003).

In summary, the case to include public health in undergraduate programs, at both 2- and 4-year institutions, is strong and being adopted; we believe that it is time to extend public health education to high schools, which could include using curricula like ours. Such an expansion will aid in the development of a pipeline of students entering college and universities who understand basic public health concepts and become committed to improving health at the community and policy levels.

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