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GENERAL ARTICLE

What Have We Learned From Collaborative Partnerships to Concomitantly Improve Both Education and Health?

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ABSTRACT

BACKGROUND: Collaborative partnerships are an essential means to concomitantly improve both education outcomes and health outcomes among K-12 students.

METHODS: We describe examples of contemporaneous, interactive, and evolving partnerships that have been implemented, respectively, by a national governmental health organization, national nongovernmental education and health organizations, a state governmental education organization, and a local nongovernmental health organization that serves partner schools.

RESULTS: Each of these partnerships strategically built operational infrastructures that enabled partners to efficiently combine their resources to improve student education and health.

CONCLUSIONS: To implement a Whole School, Whole Community, Whole Child Framework, we need to purposefully strengthen, expand, and interconnect national, state, and local collaborative partnerships and supporting infrastructures that concomitantly can improve both education and health.

Keywords: coordinated school health programs; healthy schools; health-promoting schools; collaborative partnerships; Whole School, Whole Community, Whole Child model.

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The Whole School, Whole Community, Whole Child (WSCC) Framework, depicted by Figure 1, suggests that community organizations (in the outermost ring) can help schools to implement 10 interactive components (in the next inner ring) by coordinating relevant school and community policies, processes, and practices to improve both learning and health (in the subsequent inner ring). The goal of this coordination is to ensure that all students are healthy, safe, engaged, supported, and challenged (in the innermost ring).[1] The WSCC approach requires collaborative partnerships among educational administrators and staff responsible for each of the 10 interactive components within each school district and within each school; among local health, education, and other organizations that serve young people in each community; and among state and national organizations with which these local organizations are affiliated.[2]

METHODS

The terms ‘‘collaboration’’ and ‘‘partnerships’’ often are used interchangeably. From among alternative definitions,[3] for this article, we define a collaborative partnership as ‘‘a process that enables independent individuals and organizations to combine their human and material resources so they can accomplish objectives they are unable to bring about alone.’’[4] We would add that the partners in such a partnership strategically must build and sustain an operational infrastructure to support the ‘‘process’’ that enables partners to combine their resources to achieve agreed upon

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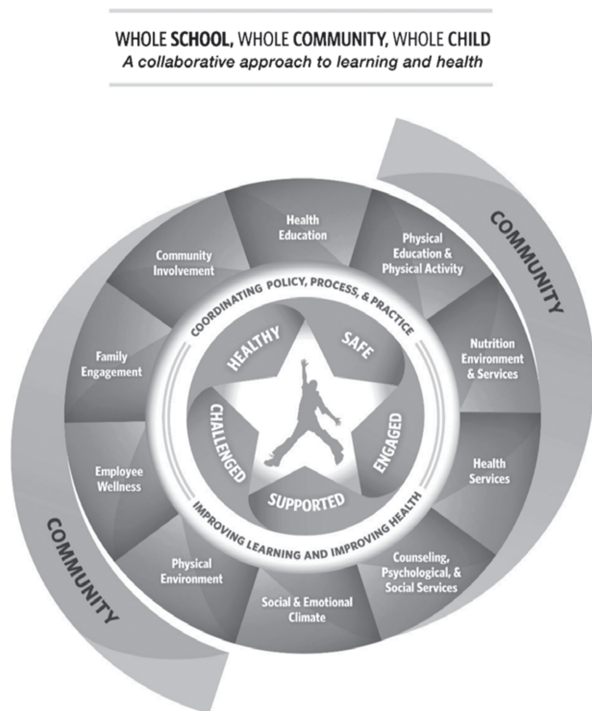
Figure 1. **Whole School, Whole Community, Whole Child (WSCC) Framework.**



objectives. Such partnerships are an essential means to concomitantly improve both education outcomes and health outcomes in the 21st century concomitantly.[5] Indeed, evidence suggests that education and health are reciprocally interactive—that healthier students simply learn better;[6-8] and that more educated adults live healthier, wealthier, and longer.[9-11]

Health organizations have recognized the need for such collaborative partnerships to improve health outcomes and consequently have developed a substantial literature to characterize and facilitate such partnerships. Illustratively, the Institute of Medicine's (IOM) report on *The Future of the Public's Health in the 21st Century*[12] explained how various sectors of society interactively create the conditions for good or poor health, suggested that public health could be defined as ''what we as a society do collectively to assure the conditions in which people can be healthy,'' and recommended that we as a society need to build ''a new generation of intersectoral partnerships that draw on the perspectives and resources of diverse communities [including schools] and actively engage them in health action.'' Indeed, *Healthy People 2020*, the nation's health objectives, includes a focus on measurably improving specific education outcomes.[13] Education organizations are developing similar processes and publications to characterize and facilitate partnerships that can improve education outcomes. Recent information about the capacity of collaborative partnerships to improve decidedly interactive education, health, and other important outcomes has increased interest among a wide range of organizations to work more closely together.[14-21]

Throughout the 20th century, many organizations implemented collaborative partnerships with supporting infrastructures to improve the education and health of K-12 students. As one example, 2 partners—the National Education Association and American Medical Association—established an operational Joint Committee on Health Problems and Education that provided sustained leadership from the 1920s into the 1970s to improve both the education and health of students.[22] In this article, however, we describe examples of more recent partnerships that contemporaneously and interactively are evolving. These examples include partnerships and supporting infrastructures implemented, respectively, by a national governmental health organization, national nongovernmental education and health organizations, a state governmental education organization, and a local nongovernmental health organization that serves partner schools. Each of the coauthors has been closely involved with one or more of these partnerships. We outline simple lessons learned from these partnerships to help inform, stimulate, and sustain more and better collaborations that can concomitantly improve both the education and health of K-12 students nationwide.

RESULTS

An Example of Partnerships Implemented by a National Governmental Health Organization

During the 1970s, the U.S. Centers for Disease Control and Prevention (CDC) began to systematically help schools nationwide to implement various types of school health programs. In 1988, CDC established a Division of Adolescent and School Health as part of CDC's then new National Center for Chronic Disease Prevention and Health Promotion.[23] At that time, human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS) had become a serious national and global pandemic for which the most effective tool available to prevent the spread of this disease was education to reduce specific risk behaviors. The CDC took the position that the nation's schools could help prevent the spread of HIV/AIDS among young people by implementing effective school HIV/AIDS education as part of a broader coordinated school health program model[24] that was a precursor to the WSCC. This approach engaged school administrators, public health professionals, teachers, school nurses, counselors, custodians, concerned community agencies, and parents to collaboratively establish effective HIV education, universal precautions to prevent the spread of HIV and other bloodborne pathogens in schools, and means to

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reduce discrimination against HIV-infected students and staff. The CDC recommended that school efforts to prevent HIV/AIDS be developed collaboratively by both education and health organizations, and that they be integrated with school efforts to prevent other sexually transmitted diseases (STDs), teen pregnancy, alcohol/drug/tobacco use, unintentional injuries and violence, physical inactivity, unhealthy eating patterns, and other serious health problems.

To help schools implement this approach, CDC initially implemented 2 types of ''cooperative agreements'' that enabled it to fund strategic collaborative partnerships: (1) with national nongovernmental education and health organizations (NGOs); and, (2) with state and large city education agencies (SEAs and LEAs). The CDC purposefully built this national network of interactive collaborative partnerships to prevent and address the health problems listed above as well as other serious health problems as resources became available. Consequently, CDC provided means and support for more than 50 national education and health NGOs, 55 state and territorial education and health departments, and the education and health departments of 19 of the nation's largest cities to work both independently and collaboratively to help the nation's local schools prevent the spread of HIV/AIDS as part of broader school health programs that addressed a wide range of other serious, and often interrelated, health and education problems. As one example of such collaborative efforts, CDC and these organizations over time worked together to develop and implement *Guidelines for Effective School Health Education to Prevent the Spread of AIDS*,[25] *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction*,[26] and *Guidelines for School Health Programs to Promote Healthy Eating and Physical Activity*.[27] As a second example, CDC and these organizations worked collaboratively to develop and implement the Youth Risk Behavior Surveillance System[28] and the School Health Policies and Practices Study.[29] As a third example, many education and health NGOs published guides to help improve cross-sector collaborations.[30-36] The CDC currently provides a wide range of support for collaborative partnerships to improve the education and health of K-12 students.[37] For example, CDC provides technical assistance and funding for state, territorial, and large city education and health agencies to monitor critical youth risk behaviors, monitor school health policies and practices, and reduce HIV infection, other STDs, unintended pregnancies, and other health problems.[38] The CDC also provides such support for several national NGOs to help state and city agencies prevent these conditions. In addition, CDC provides support for state education and health agencies to implement school health programs that can improve nutrition and physical activity, and consequently prevent obesity, diabetes, heart disease, and stroke.[39] As part of this support, CDC purposefully enables education and health organizations to work with and learn from each other.

Of course, CDC is not the only national governmental organization involved in concomitantly improving both education and health. One estimate (J. Bogden, *Student Health Advocacy Coalition Guide to the FY 2016 Federal Budget*, unpublished data, 2015) suggested that, in Fiscal Year 2015, 43 separate federal sources of technical assistance and funding provided nearly $23 billion to help the nation's schools implement various components of the WSCC Model; about $21 billion of which was for school food services. Given the potentially interactive scope of federal technical and fiscal assistance, during the 1980s and 1990s, CDC convened a federal Interagency Committee on School Health (ICSH) to enable various federal organizations to work more collaboratively together.[40] The ICSH included representatives from the US Department of Education (ED), the US Department of Health and Human Services (DHHS) (eg, Health Resources and Services Administration, National Institutes of Health, CDC), Agriculture (USDA), Interior (Bureau of Indian Education), Justice, Transportation, and the Environmental Protection Agency, among others. The ICSH was chartered in 1994 (T. Payzant, P. Lee, E. Haas, Federal Interagency Committee on School Health Charter, unpublished data, 1994) by the secretaries of ED and DHHS who together issued a joint statement that announced a new level of cooperation between their 2 departments and affirmed the importance of school health programs in achieving education goals. At that time, the ICSH was co-chaired by high-ranking officials of federal agencies, including the ED Assistant Secretary for Elementary and Secondary Education, the DHHS Assistant Secretary of Health, and the USDA Undersecretary for Food, Nutrition, and Consumer Services. The ICSH frequently invited interested national nongovernmental education and health organizations to participate in its meetings. Although the ICSH has not convened since 2000, before that time the group met semiannually to help federal agencies coordinate their respective efforts to support various school health programs nationwide.

Lessons learned. *National governmental agencies* can provide critical national infrastructures, technical assistance, funding, and support for national, state, and local education, health, and other organizations to collaboratively improve both education and health outcomes. In the past, these means and support have focused more on improving health outcomes than education outcomes.

Examples of Partnerships Implemented by National Nongovernmental Education and Health Organizations

The same charter that created the federal ICSH described above also created the National Coordinating

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Committee on School Health and Safety (NCCSHS), which is convened by the Health Resources and Services Administration. The NCCSHS continues to be the largest collaborative partnership of national education and health NGOs and federal government agencies in the United States.[41] The NCCSHS currently includes nearly 100 national organizations in the fields of education, public health, nutrition, medicine, mental health, safety, and related areas. The NCCSHS has convened annual meetings and periodic issue-specific events since 1998 (National Coordinating Committee on School Health and Safety, Themes, major presentations, and exercises: meetings 1998-2014, unpublished data, 2014).

The mission of NCCSHS is to bring together representatives of national NGOs and federal government agencies ''for collaborative activities that promote policies and programs at national, state, and local levels for advancing the health and safety of all children and adolescents and promoting their academic success.'' The NCCSHS objectives are (1) to provide national leadership for the promotion of quality coordinated school health and safety programs; (2) to convey a clear vision of the role of school health and safety programs in improving the health, safety, mental health, nutrition, and educational achievement of children and youth; and (3) to facilitate communication and collaboration among national organizations. The NCCSHS supports various Interest Networking Groups, and has developed a *School Health Results Framework* (National Coordinating Committee on School Health and Safety, unpublished data, 2014) to propose indicators of success at student, school, community, state, and national levels.

In addition to the NCCSHS, in the Year 2000 the Society of State Directors of Health, Physical Education, and Recreation (SSDHPER)—which later reorganized into the current Society of State Leaders of Health and Physical Education—helped establish a separate national NGO partnership, the Friends of School Health (FOSH). The SSDHPER organized FOSH to serve as a nonpartisan coalition that could help educate opinion leaders and decision makers, including legislative decision makers, about the nature and value of various school health policies and programs. Friends of School Health worked closely with a bipartisan Congressional caucus to sponsor events that could educate national decision makers. In 2012, this partnership further evolved to become an effective Student Health Advocacy Coalition (SHAC). Currently, SHAC enables about 40 national NGOs to collaboratively sponsor Congressional briefings, news conferences, and other education events that help opinion leaders and decision makers understand the nature and value of various coordinated school health programs for our nation's children and youth. The SHAC education and health NGO representatives also regularly educate legislators and other policymakers about key school health issues through visits to individual Congressional offices. Because SHAC sometimes advocates for school health legislation, no governmental representatives participate in these advocacy activities. The SHAC members often include the national NGO's executive director, government relations staff, or legislative staff. The SHAC thus serves as an indispensable education and health partnership to improve both education and health outcomes in our democratic society.

Lessons learned. *National education, health, and other nongovernmental organizations* together can build the infrastructure needed to help each other achieve common goals across sectors. Many national NGOs have grassroots state and local affiliate organizations that consequently can implement more effective collective actions across national, state, and local levels. By working across sectors, NGOs can be far more effective in advocating for support of school health programs; educating national, state, and local decision makers about the nature and value of school health programs; and working with national governmental organizations to implement such programs. Building and sustaining collaborative partnerships among national education, health, and other NGOs require committed and skilled NGO leaders and collaborating staff, involvement of NGO member organizations in developing a collective vision and goals, and sufficient commitment of staff time and resources for partners to achieve purposeful collective actions.

An Example of Partnerships Implemented by a State Governmental Education Organization

During the past 2 decades, the Wisconsin Department of Public Instruction—Wisconsin's State Education Agency (SEA)—has been working to concomitantly improve both education outcomes and health outcomes by building a purposeful state partnership among 4 types of partner organizations:

1. *State governmental organizations*, including the SEA, state health department (a primary and critical partner, including its chronic disease, infectious disease, nursing, emergency management, and other units), state mental and behavioral health department, governor's office, and state departments of agriculture, justice, corrections, and child welfare;
2. *State nongovernmental organizations*, including state education and health organizations, professional associations, family and youth service organizations, health care systems, and independent advocacy agencies;
3. *Public and private institutions of higher education*, including colleges of education, nursing, public health, medicine and others devoted to research, training, outreach, and community services; and

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4. *Regional and local education agencies,* which are essential partners in planning and delivering technical assistance.

Together with these partners, the SEA convenes a variety of multiorganizational boards and councils with various members, scopes, and durations to collaboratively achieve common priority goals. Specific tasks, commitments, and working relationships among partners are articulated through memoranda of understanding, contracts, and grants. The roles of these partners often change to respond to new needs. For instance, institutions of higher education sometimes sequentially provide training, technical assistance, resource development, evaluation, and improvement of specific programs as programs evolve over time.

As one example, the SEA helps these 4 types of organizations to collaboratively improve student physical activity: (1) the SEA leads and coordinates efforts of various collaborating organizations; (2) the state health department contributes physical activity expertise and resources; (3) NGOs provide technical assistance; (4) higher education partners offer specialized physical activity expertise, host training events, develop innovative resources, and lead research to assess and improve programs; (5) regional education agencies facilitate training; (6) local education agencies implement evidence-based strategies and test innovative strategies; and (7) all organizations contribute financial resources. Obviously, no one organization alone can implement this structured combination of complementary efforts. Many Wisconsin school administrators anecdotally reported[42] that these efforts had improved (1) education outcomes (such as improved student behavior and engagement in learning), and (2) health outcomes (such as increased physical activity and cardiovascular fitness).

Lessons learned. A collaborative *state partnership* can efficiently improve both education and health outcomes if the state can strategically build an operational infrastructure with elements similar to the following: (1) *Establish positions dedicated by the SEA to improve specified outcomes, filled by staff that are well qualified to help achieve these outcomes*. The SEA can employ a variety of such specialists who work together to nurture the whole child across disciplines such as school nursing, counseling, psychology, and social work; health education; physical education/activity; alcohol, tobacco and other drugs; mental health; suicide prevention; traffic safety; nutrition; sexual health; school-age parents; violence prevention; afterschool youth development; and more. (2) *Create and maintain a culture of collaboration within the state*. The SEA can expect its staff to collaborate with others within the SEA as well as within other partner organizations. Relevant SEA job descriptions, mission statements, program goals, and measures of accountability can institutionalize this expectation. (3) *Maintain open ongoing communications among partners.* The SEA and its partners collaboratively can work to identify and redress language differences between those in health and education systems. (4) *Make good use of various partner's expertise, and accommodate their respective limitations.* For example, the SEA can help integrate the health department's in-depth expertise about various health problems within the state's regional and local education agencies to collectively help design, implement, and evaluate effective programs. (5) *Identify and measure priority education and health needs and outcomes.* State partners together can specify, collect, and share priority data across organizations. (6) *Plan for long-term sustainability*. State partners together can seek and manage financial and personnel resources to support long-term partnerships as education and health problems evolve.

An Example of Partnerships Implemented by a Local Nongovernmental Health Organization That Serves Partner Schools

In the late 1990s, 2 parents concerned about the number of students engaging in unhealthy behaviors sought help from several concerned organizations in their community, including Children's Healthcare (Hospital) of Atlanta, Isakson (Senior Residential) Living, Rollins School of Public Health at Emory University, and CDC.[43] In 1999, these organizations organized a 501(c)(3) nonprofit organization, HealthMPowers, that was supported over time by additional collaborating organizations, including BlueCross BlueShield of Georgia, Healthcare Georgia Foundation, Piedmont Healthcare and Kaiser Permanente [Hospitals], Sprint, and the USDA.[44] The HealthMPowers partners built an operational infrastructure; accumulated staff; developed relationships with schools; convened a board of directors with expertise in education, health, business, law, and marketing; and focused on providing resource materials, training services, and in-school events to help schools implement evidence-based guidelines[45] that effectively could reduce overweight and obesity among K-8 students, their families, and school staff who serve them. During the 2002-2003 school year, HealthMPowers provided services to 8 schools in the Atlanta area. However, by the 2013-2014 school year, HealthMPowers was collaborating with 106 schools in 26 districts to reach more than 63,000 students, their families, and 4000 school staff.

HealthMPowers and its collaborating schools based their programs on evidence-based guidelines and a holistic approach designed to improve the health of an entire school, including its students, family members, and staff. This socio-ecological approach uses a variety of strategies—instruction, screening, social support, media, policy and environmental changes, professional development, and student health advocates.

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Key objectives were to (1) increase nutrition education and physical activity opportunities for students and staff; (2) improve student and staff knowledge about healthy eating and physical activity; (3) improve student and staff health behaviors; and (4) improve school health programs, policies, and environments.[46]

HealthMPowers has several core requirements for each partner school: a memorandum of agreement signed by the school principal that commits the schools to a 3-year ''whole school'' program; appointment of a school health coordinator; organization of a school health team; and assessments of the school environment, policies, and programs along with assessments of student knowledge, behaviors, and fitness. Each school selects from a wide variety of available interventions[47] which together are designed to concomitantly achieve important state health education[48] and physical education[49] performance standards, state physical activity goals,[50,51] and national school nutrition goals.[52] HealthMPowers assigns a liaison (teacher-leader) to work with each school health team to ensure that all school staff receive the training and follow-up support they need. A recent cohort study[46] of students who attended 40 elementary schools that implemented these HealthMPowers protocols found that participating students improved their nutrition and physical activity behaviors, cardiovascular fitness, and body composition (body mass index percentile scores). Importantly, HealthMPowers helps participating schools understand how such improvements in health outcomes might also contribute to improving education outcomes.[53]

Lessons learned. From *a local nongovernmental health organization that serves partner schools*, we learned that individuals and organizations who are committed to concomitantly improving education and health outcomes in their own schools and communities often can find others who share their commitments to collaboratively build an operational infrastructure that can improve both education and health. Education, health, business, and other organizations can organize and amalgamate the complementary perspectives, skills, and resources required to collaboratively meet common interests and needs of each local school, and its students, families, and staff. Importantly, carefully designed school programs can measurably achieve outcomes upon which partner organizations purposefully focus.

DISCUSSION

In the section on ''What Have We Learned From the History of Health Programs in the Schools?,'' the IOM report on *Schools & Health: Our Nation's Investment* recounted[54] that:

> *The schools of yesteryear were not expected to solve the health and social problems of the day by themselves; the medical, public health, social work, legislative, and philanthropic sectors all pitched in. Given the scope and complexity of the health problems of today's children and young people, it is again likely that schools will not be able to provide solutions without the cooperation and support of families, community institutions, the health care enterprise, and the political system.*

From the brief examples offered in this article, we have learned that we will need to purposefully strengthen, expand, and interconnect national, state, and local collaborative partnerships and supporting infrastructures that concomitantly can improve both education and health. Indeed, the IOM explained[55] that:

> *. . . a strong interconnected infrastructure will be essential if CSHP [coordinated school health programs] are to become established and flourish. What happens school by school is ultimately the important outcome. The national infrastructure establishes certain policies and programs that serve as a foundation for the state infrastructure; in turn, the state infrastructure develops and coordinates policies and programs that further add to the foundation for the infrastructure at the district and local school levels.*

IMPLICATIONS FOR SCHOOOL HEALTH

The IOM summarized its recommendations[55] for building such partnerships and infrastructures at national, state, and local levels as follows.

> *The committee recommends that the mission of the federal Interagency Committee on School Health be revitalized so that the ICSH fulfills its potential to provide national leadership and to carry out critical new national initiatives in school health. In addition, the committee recommends that the National Coordinating Committee on School Health serve as an official advisory body to the ICSH and that individual NCCSH organizations mobilize their memberships to promote the development of a CSHP infrastructure at the state and local levels . . .*
>
> *The committee recommends that an official state interagency coordinating council for school health be established in each state to integrate health education, physical education, health services, physical and social environment policies and practices, mental health, and other related efforts for children and families . . . [and]*
>
> *A formal organization with broad representation—a coordinating council for school health—should be established in every school district . . . [and] at the school level, individual schools should establish a school health committee and appoint a school health coordinator to oversee the school health program . . .*

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These partnerships and supporting infrastructures are essential for implementing a WSCC Framework. We thus believe the IOM Recommendations above should be implemented systematically and expeditiously.

Although we have learned much about such partnerships, we have more to determine. We need to learn how to encourage, support, improve, and sustain the implementation, effectiveness, and interaction of national, state, and local collaborative partnerships such as those we have described. We need to learn how the National Institutes of Health, the Institute of Educational Sciences, and other organizations might support research that can better articulate (1) priority education outcomes and priority health outcomes that such collaborative partnerships reasonably could be expected to achieve; (2) means to monitor those outcomes; and (3) means such partnerships might employ to measurably improve both education and health outcomes. We need to learn how our colleges of education, public health, nursing, medicine, dentistry, social work, and others might work more collaboratively to help schools in their own regions conduct multidisciplinary research and development, to provide cross-discipline in-service and preservice training,[56] and to model collaborative partnerships that might improve both education and health outcomes. We need to learn how our nation's philanthropic leaders might help support some of the activities described above. Finally, we need to learn how to make more information available about the presence, practice, and promise of such partnerships, especially information appealing to education professionals.

In sum, we expect that the WSCC approach will provide a common framework—and spark a national commitment—to more systematically foster interactive national, state, and local collaborative partnerships that can concomitantly improve both the education and health of American school students. We have learned many helpful lessons. We have now to employ them.

Human Subjects Approval Statement

This article involved no human subjects and was, therefore, exempt from examination by an institutional review board.

REFERENCES

1. Lewallyn T, Hunt H, Potts-Datema W, Zaza S, Giles W. The Whole School, Whole Community, Whole Child model: a new approach for improving educational attainment and healthy development for students. *J Sch Health*. 2015;85(11):729-739.
2. Kolbe L. On national strategies to improve education and health: an open letter. *J Sch Health*. 2015;85(1):1-7. Available at: http://onlinelibrary.wiley.com/doi/10.1111/josh.12223/epdf. Accessed February 6, 2015.
3. Wood D, Gray B. Toward a comprehensive theory of collaboration. *J Appl Behav Sci*. 1991;27(2):139-162. Available at: http://jab.sagepub.com/content/27/2/139.full.pdf+html. Accessed February 6, 2015.
4. Lasker R, Weiss E, Miller R. Partnership synergy: a practical framework for studying and strengthening the collaborative advantage. *Milbank Q*. 2001;79(2):179-205. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2751192/pdf/milq_203.pdf. Accessed February 5, 2015.
5. Institute of Medicine. *Exploring Opportunities for Collaboration Between Health and Education to Improve Population Health: Workshop Summary*. Washington, DC: National Academies Press; 2014. Available at: http://books.nap.edu/openbook.php?record_id=18979. Accessed February 6, 2015.
6. Basch C. Healthier students are better learners: a missing link in school reforms to close the achievement gap. *J Sch Health*. 2011;81(10):593-598. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1746-1561.2011.00632.x/full. Accessed February 8, 2015.
7. Bradley B, Greene A. Do health and education agencies in the United States share responsibility for academic achievement and health? A review of 25 years of evidence about the relationship of adolescents' academic achievement and health behaviors. *J Adolesc Health*. 2013;52(5):523-532. Available at: http://www.sciencedirect.com/science/article/pii/S1054139X13000505. Accessed February 8, 2015.
8. Centers for Disease Control and Prevention (CDC). *Health and Academic Achievement*. Atlanta, GA: CDC; 2014. Available at: http://www.cdc.gov/healthyyouth/health_and_academics/pdf/health-academic-achievement.pdf. Accessed April 14, 2015.
9. Cutler D, Lleras-Muney A. *Education and Health: Evaluating Theories and Evidence*. Cambridge, MA: National Bureau of Economic Research; 2007. Available at: http://www.nber.org/papers/w12352. Accessed April 14, 2015.
10. Baker D, Leon J, Greenaway E, Collins J, Movit M. The education effect on population health: a reassessment. *Popul Dev Rev*. 2011;37(2):307-332. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3188849/ Accessed April 14, 2015.
11. Zimmerman E, Woolf S. *Understanding the Relationship Between Education and Health (Discussion Paper)*. Washington, DC: Institute of Medicine; 2014. Available at: http://nam.edu/perspectives-2014-understanding-the-relationship-between-education-and-health/ Accessed August 20, 2015.
12. Institute of Medicine. *The Future of the Public's Health in the 21st Century*. Washington, DC: National Academies Press; 2002. Available at: http://books.nap.edu/openbook.php?record_id=10548. Accessed February 6, 2015.
13. US Department of Health and Human Services (USDHHS). Education and community-based programs objectives. USDHHS. *Healthy People 2020*. Washington, DC: USDHHS, Office of Disease Prevention and Health Promotion; 2015. Available at: http://www.healthypeople.gov/2020/topics-objectives/topic/educational-and-community-based-programs/objectives. Accessed February 6, 2015.
14. Kolbe L. Education reform and the goals of modern school health programs. *State Educ Standard*. 2002;3(4):4-11. Available at: http://wvde.state.wv.us/healthyschools/documents/Education_Reform.pdf. Accessed February 6, 2015.
15. Communities in Schools. Communities in Schools National Evaluation Five Year Summary Report. Arlington, VA: Communities in Schools; 2010. Available at: http://www.communitiesinschools.org/about/publications/publication/five-year-national-evaluation-summary-report. Accessed February 6, 2015.
16. Moore K, Caal S, Carney R, et al. *Making the Grade: Assessing the Evidence for Integrated Student Supports*. Bethesda, MD: Child Trends; 2014. Available at: http://www.childtrends.org/wp-content/uploads/2014/02/2014-07ISSPaper2.pdf. Accessed February 5, 2015.
17. Walsh M, Madaus G, Raczek A, et al. A new model for student support in high-poverty urban elementary schools: effects on

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elementary and middle school academic outcomes. *Am Educ Res J*. 2014;51(4):704-737. Available at: http://aer.sagepub.com/content/51/4/704.full. Accessed February 5, 2015.

18. Bryk A, Sebrig P, Allensworth E, Luppesca S, Easton J. *Organizing Schools for Improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press; 2010. Available at: http://ccsr.uchicago.edu/downloads/8499safety_in_cps.pdf. Accessed February 7, 2015.
19. Fine M, Jacobs L. *Strengthening Collaborations to Improve Social Movements: Ten Lessons from the Communities for Public Education Reform Fund (CPER)*. Chicago, IL: CPER; 2014. Available at: http://www.theneodifference.org/wp-content/uploads/2014/10/Strengthening-Collaborations-NEO-Fall-2014.pdf. Accessed February 4, 2015.
20. Jagpal N, Laskowski K. *Smashing Silos in Philanthropy: Multi-issue Advocacy and Organizing for Real Results*. Washington, DC: National Committee for Responsive Philanthropy; 2013. Available at: http://www.ncrp.org/files/publications/Smashing_Silos_in_Philanthropy_Multi-Issue_Advocacy_and_Organizing_for_Real_Results.pdf. Accessed February 4, 2015.
21. Alliance to Reclaim Our Schools. Organizing for educational justice: parents, students and labor join forces to reclaim public education. *Respons Philanth*. 2014;2:1, 9-10. Available at: http://ncrp.org/publications/responsive-pubs/rp-archive/responsive-philanthropy-summer-2014/organizing-for-justice. Accessed February 4, 2015.
22. Institute of Medicine. Evolution of school health programs. In: Allensworth D, Lawson E, Nicholson L, Wyche J, eds. *Schools & Health: Our Nation's Investment*. Washington, DC: National Academy Press; 1997:39. Available at: http://www.nap.edu/openbook.php?isbn=0309054354. Accessed February 4, 2015.
23. Kolbe L, Kann L, Patterson B, Wechsler W, Osorio J, Collins J. Enabling the nation's schools to help prevent heart disease, stroke, cancer, COPD, diabetes, and other serious health problems. *Public Health Rep*. 2004;119:286-302. Available at: http://www.publichealthreports.org/issueopen.cfm?articleID=1376. Accessed February 5, 2015.
24. Allensworth D, Kolbe L. The comprehensive school health program: exploring an expanded concept. *J Sch Health*. 1987;57(10):409-412.
25. Centers for Disease Control and Prevention. Guidelines for effective school health education to prevent the spread of AIDs. *MMWR Morb Mort Wkly Rep*. 1988;37(S2):1-14. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/00001751.htm. Accessed February 5, 2015.
26. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *MMWR Morb Mort Wkly Rep*. 1994;43(RR-2):1-18. Available at: http://www.cdc.gov/mmwr/PDF/RR/RR4302.pdf. Accessed February 5, 2015.
27. Centers for Disease Control and Prevention. School health guidelines promote healthy eating and physical activity. *MMWR Morb Mort Wkly Rep*. 2011;60(RR-5):1-76. Available at: http://www.cdc.gov/mmwr/pdf/rr/rr6005.pdf. Accessed February 5, 2015.
28. Centers for Disease Control and Prevention. Youth risk behavior surveillance—United States. *MMWR Morb Mort Wkly Rep*. 2014;63(4):1-70. Available at: http://www.cdc.gov/mmwr/pdf/ss/ss6304.pdf. Accessed February 5, 2015.
29. Centers for Disease Control and Prevention (CDC). *Results from the School Health Policies and Practices Study 2012*. Atlanta, GA: US Department of Health and Human Services, CDC; 2013. Available at: http://www.cdc.gov/healthyyouth/shpps/2012/pdf/shpps-results_2012.pdf. Accessed February 5, 2015.
30. Earle J, Kane W, Sullivan C. *How Schools Work and How to Work with Schools*. Alexandria, VA: National Association of State Boards of Education; 1990. Available at: http://www.nasbe.org/project/center-for-safe-and-healthy-schools/how-schools-work/. Accessed February 8, 2015.
31. Council of Chief State School Officers and Association of State and Territorial Health Officials. *Why Support a Coordinated Approach to School Health?* Washington, DC: Council of Chief State School Officers; 2000.
32. Bodgen JF. *Fit, Healthy, and Ready to Learn: A School Health Policy Guide Series*. Alexandria, VA: National Association of State Boards of Education; 2000-2013. Available at: http://www.nasbe.org/project/center-for-safe-and-healthy-schools/fhrtl/. Accessed February 8, 2015.
33. Association of State and Territorial Health Officials (ASTHO), Society of State Directors of Health, Physical Education and Recreation (SSDHPER). *Making the Connection: Health and Student Achievement* [compact disc]. Washington, DC: ASTHO, SSSDHPER; 2002.
34. National Association of Chronic Disease Directors (NACDD). *Speaking Education's Language: A Guide for Public Health Professionals Working in the Education Sector*. Atlanta, GA: National Association of Chronic Disease Directors; 2003. Available at: http://www.ashaweb.org/wp-content/uploads/2014/08/nacdd_educationsector_guide_.pdf. Accessed November 6, 2014.
35. National Association of Chronic Disease Directors (NACCD), National Association of State Boards of Education (NASBE), American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD). *State School Health Policy Matrix*. Atlanta, GA: NACDD; 2014. Available at: http://c.ymcdn.com/sites/www.chronicdisease.org/resource/resmgr/school_health/final_state_school_health_po.pdf. Accessed February 5, 2015.
36. National Association of Chronic Disease Directors (NACDD). *Partnering for Success: How Health Departments Work and How to Work with Health Departments*. Atlanta, GA: NACDD; 2012. Available at: http://c.ymcdn.com/sites/www.chronicdisease.org/resource/resmgr/school_health/cdchhdwbrochureweblogo.pdf. Accessed February 5, 2015.
37. Centers for Disease Control and Prevention (CDC). *Adolescent and School Health*. Atlanta, GA: CDC; 2015. Available at: http://www.cdc.gov/healthyyouth/index.htm. Accessed February 5, 2015.
38. Centers for Disease Control and Prevention (CDC). *Table of Agencies and Funded Categories*. Atlanta, GA: CDC; 2015. Available at: http://www.cdc.gov/healthyyouth/partners/funded/table.htm. Accessed February 5, 2015.
39. Centers for Disease Control and Prevention (CDC). *State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors And Promote School Health*. Atlanta, GA: CDC; 2013. Available at: http://www.grants.gov/web/grants/view-opportunity.html?oppId=221573. Accessed February 5, 2015.
40. Institute of Medicine. Building the infrastructure for comprehensive school health programs. In: Allensworth D, Lawson E, Nicholson L, Wyche J, eds. *Schools & Health: Our Nation's Investment*. Washington, DC: National Academy Press; 1997:238-245. Available at: http://www.nap.edu/openbook.php?isbn=0309054354. Accessed February 4, 2015.
41. Potts-Datema W, Smith B, Taras H, Lewallen T, Bogden J, Murray S. Successful strategies and lessons learned from development of large-scale partnership of national non-governmental organizations. *Promot Educ*. 2005;12(3-4):131-137.
42. Wisconsin Department of Public Instruction (DPI). *Wisconsin Success Stories—Active Schools*. Madison, WI: Wisconsin DPI; 2012. Available at: http://sspw.dpi.wi.gov/sites/default/files/imce/sspw/pdf/pasasactiveschlsstories.pdf. Accessed February 4, 2015.
43. HealthMPowers. History. Available at: http://healthmpowers.org/about-us-3-4/history/. Accessed January 29, 2015.
44. HealthMPowers. *Empowering Healthy Choices: 2013-14 Annual Report*. Atlanta, GA: HealthMPowers; 2014. Available at: http://healthmpowers.org/wp-content/uploads/2014/12/

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2013-2014-Annual-Report_Final-1.pdf. Accessed December 23, 2014.
45. Centers for Disease Control and Prevention. School health guidelines to promote healthy eating and physical activity. *MMWR Morb Mort Wkly Rep*. 2011;60(5):1-78. Available at: http://www.cdc.gov/mmwr/pdf/rr/rr6005.pdf. Accessed February 5, 2015.
46. Burke R, Meyer A, Kay C, Allensworth D, Gazmararian J. A holistic school-based intervention for improving student health-related knowledge, body composition, and fitness: a cohort study of the HealthMPowers program. *Int J Behav Nutr Phys Act*. 2014;11(78). Available at: http://www.ijbnpa.org/content/11/1/78. Accessed on January 2, 2015.
47. HealthMPowers. Multi-year program resources. Available at: http://healthmpowers.org/programs-services/three-year-program-resources/. Accessed January 24, 2015.
48. Georgia Department of Education. Georgia Performance Standards: Health Education. Available at: https://www.georgiastandards.org/Standards/Pages/BrowseStandards/HealthEd.aspx. Accessed February 3, 2015.
49. Georgia Department of Education. Georgia Performance Standards: Physical Education. Available at: https://www.georgiastandards.org/Standards/Pages/BrowseStandards/PhysEd.aspx. Accessed February 3, 2015.
50. Georgia SHAPE. Make the pledge to Power Up for 30. Available at: http://www.georgiashape.org/home. Accessed February 5, 2015.
51. Georgia Department of Public Health. *2011-2012 Georgia's Nutrition and Physical Activity Strategic Plan*. Atlanta, GA: Georgia Department of Public Health; 2011. Available at: http://beproactivefoundation.org/media/6a9a857bc6e14cbdffff8020ffffd523.pdf. Accessed February 5, 2015.
52. HealthMPowers. *2012-13 Georgia SNAP-Ed Report*. Atlanta, GA: HealthMPowers; 2013. Available at: http://healthmpowers.org/wp-content/uploads/2014/12/SNAP-Ed-Annual-Report-2013.pdf?iframe=true&width=100%&height=100%. Accessed February 5, 2015.
53. HealthMPowers. Improving academic achievement through a comprehensive physical activity program. Available at: http://healthmpowers.org/public-resources/physical-activity-academic-achievement-2/. Accessed February 5, 2015.
54. Institute of Medicine. Evolution of school health programs. In: Allensworth D, Lawson E, Nicholson L, Wyche J, eds. *Schools & Health: Our Nation's Investment*. Washington, DC: National Academies; 1997:48-50. Available at: http://www.nap.edu/openbook.php?isbn=0309054354. Accessed February 2, 2015.
55. Institute of Medicine. Building the infrastructure for comprehensive school health programs. In: Allensworth D, Lawson E, Nicholson L, Wyche J, eds. *Schools & Health: Our Nation's Investment*. Washington, DC: National Academies; 1997:261-270. Available at: http://www.nap.edu/openbook.php?isbn=0309054354. Accessed February 5, 2015.
56. Birch D, Videto D, eds. *Promoting Health and Academic Success: The Whole School, Whole Community, Whole Child Approach*. Champaign, IL: Human Kinetics; 2015. Available at: http://www.humankinetics.com/products/all-products/Promoting-Health-and-Academic-Success. Accessed February 5, 2015.

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