

GENERAL ARTICLE

Lessons Learned From the Whole Child and Coordinated School Health Approaches

CATHERINE N. RASBERRY, PhD, MCHES^a SEAN SLADE, MEd, BEd^b DAVID K. LOHRMANN, PhD, MCHES, FASHA, FAAHE^c
ROBERT F. VALOIS, MS, PhD, MPH, FASHA, FAAHB, FAAHE^d

ABSTRACT

BACKGROUND: The new Whole School, Whole Community, Whole Child (WSCC) model, designed to depict links between health and learning, is founded on concepts of coordinated school health (CSH) and a whole child approach to education.

METHODS: The existing literature, including scientific articles and key publications from national agencies and organizations, was reviewed and synthesized to describe (1) the historical context for CSH and a whole child approach, and (2) lessons learned from the implementation and evaluation of these approaches.

RESULTS: The literature revealed that interventions conducted in the context of CSH can improve health-related and academic outcomes, as well as policies, programs, or partnerships. Several structural elements and processes have proved useful for implementing CSH and a whole child approach in schools, including use of school health coordinators, school-level and district-level councils or teams; systematic assessment and planning; strong leadership and administrative support, particularly from school principals; integration of health-related goals into school improvement plans; and strong community collaborations.

CONCLUSIONS: Lessons learned from years of experience with CSH and the whole child approaches have applicability for developing a better understanding of the WSCC model as well as maximizing and documenting its potential for impacting both health and education outcomes.

Keywords: coordinated school health; whole child; education outcomes; child health; health outcomes; Whole School, Whole Community, Whole Child (WSCC) model.

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In 2014, ASCD—formerly known as the Association for Supervision and Curriculum Development—and the US Centers for Disease Control and Prevention (CDC) first unveiled the new Whole School, Whole Community, Whole Child (WSCC) model, which encompasses links between health and learning. This model, based on foundational concepts of both coordinated school health (CSH) and a whole child approach, is designed to reflect decades of research, practice, and lessons learned in a model that can have broad-based appeal for both health professionals and educators alike.

The purpose of this article is to provide the history behind the foundational CSH and whole child concepts that underlie the new WSCC model, and to articulate many of the key lessons learned from the implementation and evaluation of these commonly used approaches. In addition, we describe key implications for school health, with a focus on how lessons learned from years of experience with CSH and the whole child approach have applicability for developing a better understanding of the WSCC model as well as maximizing and documenting its potential for impacting both health and education outcomes.

^aHealth Scientist, (CRasberry@cdc.gov), Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, TB Prevention, Division of Adolescent Health, 1600 Clifton Road, MS: E-75, Atlanta, GA 30329.

^bDirector of Whole Child Programs, (sslade@ascd.org), ASCD, 1703 N. Beauregard Street, Alexandria, VA 22311-1714.

^cProfessor and Chair, (dlohman@indiana.edu), Indiana University School of Public Health-Bloomington, Department of Applied Health Science, 1025 East Seventh St., SPH 116, Bloomington, IN 47405.

^dProfessor, (RFValois@sc.edu), Department of Health Promotion, Education & Behavior, Arnold School of Public Health, University of South Carolina, 915 Green Street, Room 534A, Columbia, SC 29208.

Address correspondence to: Catherine N. Rasberry, Health Scientist, (CRasberry@cdc.gov), Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, TB Prevention, Division of Adolescent Health, 1600 Clifton Road, MS: E-75, Atlanta, GA 30329.

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LITERATURE REVIEW

History of CSH

The initial 8-component model of the CSH approach was first introduced in 1987—then termed “comprehensive school health”—via a special issue of the *Journal of School Health*.¹ Previously, school health was conceptualized as a “3-legged stool” comprised of health education, health services, and the healthy school environment.¹ CSH involved both implementation of programs and services within 8 high-quality components and systemic coordination in order to eliminate gaps and overlaps and best use available personnel, time and resources.¹

The 8-components approach, and variants of it adopted by some states,^{2,3} is an innovation that has enjoyed an impressive dissemination and adoption curve.⁴ This likely was facilitated by the decision of CDC’s Division of Adolescent and School Health to embrace the model.⁴ CDC, in collaboration with other organizations including the American School Health Association (ASHA), implemented a number of actions in support of this new approach. For example, CDC funded development of a book, *Health Is Academic: A Guide to Coordinated School Health Programs*,⁵ that provided a broad delineation of CSH and its components along with state and local dissemination strategies.

In addition, CDC issued cooperative agreements to national organizations and state education agencies for the purpose of developing and disseminating policies and programs in support of CSH.^{6,7} In 1992, 5 state education agencies were initially selected to implement CSH infrastructure such as funding and authorization, personnel and organizational placement, communication and linkages, and resources⁸ internally and with their sister state health agency over 5 years; under this agreement, a CSH coordinator position was funded in both the state-level education and health agencies and a health education specialist was funded in the education agency. Their collective charge was to organize the analogous 8 CSH components between their respective agencies and, then, to instigate CSH adoption in local education agencies/school districts via technical assistance and training.⁸ In the late 1990s, CDC shifted the funding focus to encourage education agencies at both the state and local levels to achieve specific health-related outcomes such as increased physical activity, improved nutrition, prevention of tobacco use, and reduction in sexual risk behaviors through use of the CSH approach. To date, CDC continues to support the tenets of CSH, now incorporated into the WSCC model, as a foundation for improving health outcomes of students in schools.

Along with the publication of the book *Health Is Academic*,⁵ documents from the American Cancer Society emerged to provide detailed guidance for

implementing the essential structures of CSH including employment of a health coordinator,⁹ and differentiation of a system-wide CSH coordinating council¹⁰ from school building-level CSH teams. Thereafter, the American Cancer Society, with funding from CDC, conducted 2 sequential 18-month long School Health Coordinator Leadership Institutes designed to assist school districts’ adoption and implementation of CSH.¹¹ The initial Institute was inaugurated in 1999 for 50 participants from across the United States; these participants subsequently were expected to assume the role of CSH coordinator in their respective school districts. The second Institute involved teams from 6 large urban school districts that enrolled hundreds of thousands of pre-K-12 students. Thereafter, the CSH Leadership Institute model was replicated regionally by CDC-funded state education agencies, sometimes in collaboration with American Cancer Society affiliates, in the US northeast, mid-Atlantic, midwest, and southwest regions plus California. This strategy of supporting school district coordinators and teams to implement CSH was shown to be effective.¹²⁻¹⁶ In addition, the American Cancer Society has worked with CDC in more recent years to provide CSH-related trainings to professionals teaching in higher education so that they can better prepare their students for teaching school health.

ASCD’s initial foray into CSH occurred in 2003 when the Robert Wood Johnson Foundation provided funding to develop a tool that educators could use to assess the status of CSH in schools. Following an extended development process that involved an expert panel review and conferences followed by field testing,^{15,16} the assessment tool was published as an ASCD book entitled *Creating a Healthy School Using the Healthy School Report Card*.¹⁶ Thereafter, the tool was used in several Leadership Institute replications,^{12,15,17} a Canadian version was disseminated,¹⁸ and an extensive evaluation was conducted at 11 funded schools in both the United States and Canada. This evaluation, for the first time, documented the participation of the school principal as essential to successful CSH implementation.^{19,20} These activities aligned and supported ASCD’s subsequent development of a whole child approach launched in 2006.

History of the Whole Child Approach

In 2006, ASCD convened the Commission on the Whole Child. This Commission was composed of leading thinkers, researchers, and practitioners all drawn from a wide variety of sectors and was charged with recasting the definition of a successful learner from one whose achievement is measured solely by academic tests, to one who is knowledgeable, emotionally and physically healthy, civically inspired, engaged in the arts, prepared for work and economic

self-sufficiency, and ready for the world beyond formal schooling.

The Commission was convened to start a dialogue to change what is meant by a successful school, a successful education, and ultimately a successful student. It was a discussion directly aimed at the current educational landscape of 2007—dominated by the No Child Left Behind Act of 2001—which was moving the nation toward an ever greater focus on an academics-above-all-else educational system.

The Commission began with a discussion of how an ideal education—one that places the child at the center—would look. It asked how resources, both personnel and facilities, would be arranged if the child was key in the equation. In 2007, Dr Gene R. Carter, Executive Director of ASCD, summed this up as follows: “If decisions about education policy and practice started by asking what works for the child, how would resources—time, space, and human—be arrayed to ensure each child’s success? If the student were truly at the center of the system, what could we achieve?”²¹ (p4)

The Whole Child Initiative was borne out of this discussion and this Commission. It established 5 tenets which provide the framework for what a well-rounded, holistic, and effective education must focus upon, ensuring that each child, in each school, and in each community, is healthy, safe, engaged, supported, and challenged. The tenets refer directly back to Abraham Maslow’s Hierarchy of Needs which was set out in the 1943 paper, “A Theory of Human Motivation.”²² The original hierarchy established the foundational or base needs (physiological) at the bottom of the pyramid, followed subsequently by safety, love, and belongingness, esteem, and self-actualization. It established, via its pyramid structure, the understanding that achieving certain needs was possible only after others had been met.

Based on this structure, the whole child tenets were arranged to demonstrate that health and then safety were fundamental in establishing environments in which students truly can be engaged, supported, and, ultimately, challenged. By focusing initial attention on “healthy,” the Whole Child Initiative actively promoted the role of school health services and health-promoting entities in the school and community. It shined a light on the imperative need for schools to consider not just the academic outcomes of the students but their health and well-being, as well, both as ways of improving educational outcomes and for fostering the holistic development of the individual child beyond the academic. It proposed that districts and schools place additional initial attention on the environment in which learning takes place before embarking directly upon that learning. Again, the Whole Child Initiative was borne out of an understanding that students cannot learn if they are

not healthy and safe, and subsequently, will not learn if they are not engaged, supported, and challenged.

The Whole School, Whole Community, Whole Child Model

In 2013, ASCD and CDC jointly convened a group of leaders in school health, education, and public health. These leaders sought to develop a framework that would “strengthen a unified and collaborative approach to learning and health”²³ (p6) building off the valuable tenets of both the Whole Child Initiative, which was often viewed as primarily education-focused, and the CSH approach, which was often viewed as primarily health-focused.²³ The result was the Whole School, Whole Community, Whole Child model—the next iteration in the evolution of these 2 conceptual approaches merged into 1 unified framework.

Lessons Learned From CSH and Whole Child Approaches

The use of CSH and whole child approaches over time has provided many lessons learned. CSH, from its inception, has provided education and health professionals with a well-planned and easily understood framework for addressing the health-related aspects of the whole child. In the original model presented by Allensworth and Kolbe, 8 program components of CSH stretched across a variety of student needs, and outcomes reflected in the model extended beyond health behaviors to include outcomes related to cognitive performance and educational achievement, both of which are linked to health.¹ The innovation of the model was that it brought to the forefront the interplay between varied aspects of health and related school activities, and highlighted the interdependence of each component with the others. The CSH model provides a framework for conceptualizing interventions to address a wide spectrum of students’ needs that are often foundational for both students’ health and ability to learn in school.

CSH is not simply a framework to inform and support implementation of health-related interventions; research indicates that interventions conducted in the context CSH can be successful. To date, most research has investigated either health education or health promotion interventions that focus on key topics within the CSH model such as physical education or nutrition education²⁴⁻²⁷ or use of CSH processes and structures to bring about improvements in policies, programs, or partnerships.^{12,15,28,29} Researchers have found evidence of effectiveness among several more narrowly focused programs implemented in the context of CSH, including programs for physical activity,²⁵ nutrition,²⁶ and childhood obesity.^{24,27} The literature also contains several examples of CSH approaches and related infrastructure facilitating success in the implementation of program activities.^{15,24,29} In addition,

researchers have provided some support for an association between CSH programs and outcomes related to academic achievement.^{30,31}

One challenge for CSH is that although CSH provides a framework for addressing multiple aspects of children's health, research, and evaluation activities that address student-level health and academic outcomes have rarely reflected the comprehensive nature of CSH. This may be part of the reason that, even as far back as 1998, leaders in school health described CSH as a program for which "the promise . . . thus far outshines its practice."^{5(p10)} Much of the research on outcomes and effect of CSH has been among the more narrowly defined programs situated within the context of CSH, as described above. Similarly, researchers have commented about the challenges of sustainability and resulting change from such narrowly focused and more programmatic-oriented approaches to CSH.¹⁹ In a 2015 publication, Valois et al discuss limitations of mere programmatic change and suggest that, instead, health and school improvement efforts can be enhanced and better sustained when they are founded on systemic changes within schools.²⁰ Likewise, CDC has recently explored CSH through the perspective of a systemic framework in an attempt to better understand what makes the strongest programs successful.³²

Ultimately, schools are the domain of education and, as such, any initiative must have educational benefit to be successfully implemented and must be aligned to processes in the existing educational setting. One challenge for CSH has been that viewing it as a health initiative, focused on health for health's sake only, has not required health and well-being to be conceptualized as a core component of an effective school and an effective educational system. Yet the evidence supports the idea that health and education are symbiotic—each benefits from the other.^{33,34} It is why in 2002 the then Director of CDC's Division of Adolescent School Health, Lloyd Kolbe wrote,

In sum, if American schools do not coordinate and modernize their school health programs as a critical part of educational reform, our children will continue to benefit at the margins from a wide disarray of otherwise unrelated, if not underdeveloped, efforts to improve interdependent education, health, and social outcomes. And, we will forfeit one of the most appropriate and powerful means available to improve student performance.^{35(p10)}

Fortunately, several key lessons from CSH suggest ways in which CSH and related whole child approaches can be positioned in school settings. Across the literature on CSH, one of the key lessons to emerge is the critical nature of infrastructure within the school and district to support health-related activities. Although infrastructure may vary from school to school and district to district, a few standard

infrastructure recommendations for supporting CSH implementation have included the presence of a school health coordinator, a district-level school health advisory or coordinating council, and school-level health teams or committees.³⁶⁻⁴¹ District-level and school-level councils/teams typically include school or district representatives from all 8 components of CSH as well as community members, parents, and students. These teams, with leadership and guidance from a school health coordinator, are typically responsible for coordination between the 8 CSH components and implementing activities to improve health within schools.³⁸

Once this infrastructure is in place, the use of a systematic assessment and planning process can help coordinators and councils/teams identify their school or district's specific health-related needs, prioritize those needs, and develop plans to effectively address them. This assessment and planning process can take several different forms: some councils/teams structure this around use of the *School Health Index*⁴² or the *Healthy School Report Card*.^{16,18} Regardless of the tool or format used, this process can be most effective when it is data-driven and includes defining priorities, assessing existing and available resources, developing clear and measurable goals and objectives, and developing an action plan with a timeline for reaching those goals and objectives.^{38,39}

In addition to having key infrastructure in place, the importance of having strong leaders/champions^{40,43} and administrative support and buy-in³⁸ is well supported by the literature about CSH.^{4,37,43} Leaders and champions, from both within and outside of schools, can build support for CSH in ways that allow its proponents to overcome challenges and barriers that might otherwise impede progress.⁴⁰ In particular, one recent study conducted for and released by ASCD found that leadership from school principals was critical for bringing about meaningful change in schools.^{19,20} Administrative support and buy-in are critical for ensuring sustained commitment to CSH and health-related goals. This support may be evidenced by incorporation of health-related goals into vision and mission statements and/or school improvement plans, assignment of staff to oversee school health, and allocation of resources to address health-related needs.

The role of leadership and integration into school improvement plans is further articulated in a 2011 report from ASCD that described findings from its work in integrating a whole child approach with a focus on health and well-being into the systems and functions of the school.¹⁹ The report summarized key actions schools had undertaken to ensure integration and sustainability, and as a result, identified "9 levers" that mobilized change in school communities: (1) the principal as leader; (2) active and engaged leadership; (3) distributive leadership; (4) integration with the

school improvement plan; (5) effective use of data for continuous school improvement; (6) ongoing and embedded professional development; (7) authentic and mutually beneficial community collaborations; (8) stakeholder support of the local efforts; (9) the creation or modification of school policy related to the process.^{19,20}

Of these 9 levers, 2 appeared particularly influential—the principal as leader and integration with the school improvement plan. These were particularly important for initiatives, especially ones that may at first glance be viewed as superfluous to the school's primary mission, to be successfully implemented and sustained. The commonality across these 2 levers is that they establish an educational rationale to the process and the initiative. Having tangible acceptance, commitment, and active engagement of the principal as seminal to any health-related improvement initiative allows the school, staff, students, and families to view that initiative as educationally beneficial. Subsequently they are more accepting and open to seeing the connections between health, well-being, safety, connectedness, and pedagogy; and any changes or adaptations related to the initiative are more likely to be integrated into the broader policies affecting the school. By integrating the initiative or focus with the school improvement plan, one additionally aligns it to effective education and pedagogy, thereby allowing the initiative to become a key part of what the administration and its teachers discuss and target annually, and the initiative becomes further integrated into adjunct policies. The school improvement plan provides the direction for and purpose of the school, as well as the implementation pathway.^{19,20}

A whole child approach to education—one which seeks to ensure that each child is healthy, safe, engaged, supported, and challenged—appreciates that, “children do not develop and learn in isolation, but rather grow physically, socially, emotionally, ethically, expressively, and intellectually within networks of families, schools, neighborhoods, communities, and our larger society.”^{21(p11)} Initiatives to help address these aspects of growth, whether framed as whole child or CSH initiatives, can best gain footing when those initiatives are aligned with the purpose of the school—its mission, policies, and pedagogy.

Finally, from years of research and practice in CSH and a whole child approach, the vital role of the community has emerged. In a whole child approach, “authentic and mutually beneficial community collaborations” have been identified as a key lever of shifting a school's culture,¹⁹ and in CSH, it has become clear that community assets can be a lifeline for CSH activities. Furthermore, CSH offers a framework by which a school or district can harness community assets. As other researchers have previously suggested, the CSH approach may be best explained and

understood in the context of an ecological framework,^{4,40} which can help account for the context and influence of community on health. With the integration of community members as stakeholders and participants in district-level councils and school-level teams, CSH structures and processes offer a natural opportunity for community organization and community building that can help make key community resources available to students and staff and can strengthen the overall community at the same time.

Although the appreciation of what constitutes an effective education is changing and has changed since both the introduction of No Child Left Behind⁴⁴ and, somewhat coincidentally with the introduction of the Whole Child Initiative, there is still and likely always will be a necessity to link any new initiative back to the processes and functions of the school and its educational outcomes whether these be academic, cognitive, or developmental. As other researchers have suggested, shifting the language and framing of CSH and a whole child approach to reflect more of a general school-improvement focus, one that can meet the needs of the whole child and resonate with both educators and community members outside of the health profession, may enable health professionals to better achieve the goal of healthy students.^{19,45} In a 2010 article, Hoyle et al went so far as to say “insistence on alignment of programs under the ‘health’ banner is detrimental to the purpose and mission of both school health and school improvement.”^{45(p165)} Instead, they suggested that school health professionals could offer knowledge and skills in the processes of developing, implementing, and evaluating health-related interventions.⁴⁵ These processes, implemented through the foundational infrastructure components used to support CSH and seen in the 9 levers explored through the whole child approach, can facilitate improvement in a variety of student outcomes, including those related to health.

IMPLICATIONS FOR SCHOOL HEALTH

For school and education agency staff to be motivated and able to successfully implement the CSH and whole child tenants reflected in the WSCC model, staff members likely need evidence-based suggestions for the implementation process and articulation of outcomes that can be reasonably expected. To provide this information, we believe there are several key areas of research that are warranted.

First, we recommend that researchers investigating CSH and the whole child approach, as now reflected in the WSCC model, continue to focus on the ecological aspects of the model, particularly the role of community. School staff involved in CSH programs have reported that the CSH approach has helped their schools develop new partnerships within

their communities,^{12,46} and these partnerships can be critical for meeting students' needs. This vital role of community is reflected in the new WSCC model in both the community involvement component as well as the positioning of all of the other CSH-based components within the context of community.²³ To support school and district staff, we recommend school health experts consider developing tools and recommendations for how the WSCC model can best be used to assess and harness community assets to enable schools to meet the needs of the whole child. Such tools and recommendations—developed using language that can resonate with a broad range of stakeholders including not only health professionals but also educators and community members as well—could serve as valuable resources to school and district staff, particularly in an environment filled with more and more demands on fewer and fewer resources.

Second, we recommend that researchers exploring the WSCC model seek to provide additional insight into the “how” and not just the “what” of the model. Specifically, the traditional 8-component CSH model and now the WSCC model both provide a pragmatic visual representation of the different aspects of health that can be addressed through comprehensive approaches. The WSCC model takes this a step farther by presenting the role of “coordinating policy, process, and practice” visually within the model. However, neither model is designed to provide school and health professionals with explanations of how to do that coordination. Although many professionals have sought to add to the “how” descriptions by delineating key infrastructure and processes used in CSH,^{36-41,47} future researchers and practitioners in school health can seek to provide additional information and tools to help articulate how such infrastructure pieces and key processes can be coordinated and implemented effectively. To the extent that the WSCC model functions as a system connecting students, families, schools, and communities, the literature on systems change may offer insight into ways school health professionals can better articulate how the “coordinated” aspect of the model can be accomplished and strengthened.

Finally, we recommend research be conducted about the WSCC model as a whole, not simply individual components within the model, in order to assess the cumulative effect that can result from a comprehensive approach to addressing health and the whole child. In the last several decades, researchers have gathered additional evidence to support the use of CSH, and importantly, to begin to understand the structures and processes necessary to use CSH effectively. What continues to remain largely missing from the scientific literature is a holistic examination of the full CSH model that assesses a broad range of

outcomes in 1 comprehensive evaluation. In theory, the value of the CSH model comes from the synergistic effect gained from coordinated interventions to address multiple aspects of co-occurring needs. Examining the new WSCC model, inclusive of foundational CSH concepts, through research that is longitudinal in nature and, ideally, designed to represent schools and communities of various sizes⁴⁸ may provide researchers with the best opportunity to capture the full impact of the model's value for improving the health and well-being of youth.

Human Subjects Approval Statement

Preparation of this paper did not include performing original research requiring inclusion of human subjects.

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