Integrating Public Health in Schools to Improve Graduation
Acknowledgments

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“Having APHA/CSHE’s investment ... lent tremendous credibility to our efforts and ultimately got us into doors that were previously closed, helped us gain new partners ... and offered us greater opportunities to share and disseminate this work.” — School-based health center administrator
Executive Summary

Creating opportunities despite the odds

“A student was dealing with parental death and other serious issues. However, s/he was the poster child for the perfect student — never sad, just normal. After being identified as having suicide ideation, the student was admitted to the hospital. When s/he returned to school s/he told me, ‘I just want to say thank you. I don’t know where I’d be right now if you all hadn’t done this.’” — High school principal

We never know the whole story of why a student decides to drop out. What we do know is that it is easier for a student to be pushed out of school than to remove the odds that are stacked against his or her graduating from high school on time. Some of these odds are food insecurity, exposure to trauma and violence, and substandard living conditions. When left unmanaged over a prolonged period of time, these conditions cause students to experience chronic stress, which can lead to suicidal thoughts and disengagement from school and lead to the life-altering decision of dropping out. The pathways to and consequences of dropping out perpetuate an insidious cycle of poverty, disparities and entrenched inequities that underscore why graduation has become a public health priority.1,2

The American Public Health Association’s Center for School, Health and Education works to find the cracks and sinkholes in our nation’s most challenged schools and provide safety nets, resources and a common voice among educators, school-based health care providers, students, parents and community members to come together and make sure all students graduate on time. Keeping students on track toward graduating from high school is the best way to disrupt deleterious cycles of social, economic and health hardships, which are often precipitated by low educational attainment.

CSHE’s journey to discovering a new path to address school dropout through integrating public health in schools has been extremely challenging, daunting and sometimes unnerving. At times, the challenges seemed unsurmountable, but the successes speak to five years of collaborating with overworked and underresourced schools to save the lives of students at the tipping point of dropping out of school or attempting to end their own lives.

The strategies imparted by the program were most impactful in schools led by transformational leaders who continue to prioritize systems thinking and multisector collaboration beyond their direct engagement with CSHE. For instance, a high school principal in Cincinnati regularly strategizes with administrators from other local school districts to understand and address the higher prevalence of behavioral disruptions among incoming middle school students. During these engagements, the principal might share lessons learned from her school’s Bigs & Littles program that pairs younger and older students with similar backgrounds and experiences to increase their successful navigation of high school. The principal has also prevented suspensions and expulsions by incorporating non-punitive and upstream approaches — such as peer juries, a Chill Room, and paid community service internships for seniors not on track to graduate — into a comprehensive strategy for preventing dropout. These approaches focus on emotional regulation, relationship repair and civic engagement as alternatives to zero tolerance intervention. Likewise, leaders in Los Angeles are planting seeds for schools to consider how they can become microcosms of healthy communities to better meet the diversity of needs among students and their families with upstream approaches such as restaurant jobs for students in the cafeteria and curricula that allow students to create and manage fruit and vegetable gardens.
By creating a pipeline of school-linked professionals with competencies in public health across the country, CSHE’s Program to Improve Graduation offers a model for improving graduation rates in America with a priority focus on: (1) strengthening relationships between staff, students and their community; (2) enhancing organizational capacity to integrate public health into practice; (3) expanding internal and external partnerships; (4) strengthening stakeholder support for advancing shared goals; (5) improving schoolwide policies, practices, and procedures; and (6) improving the impact that program strategies are having on students.

**Advancing equity in action**

The Program to Improve Graduation bridges gaps in knowledge and practice for school-linked professionals to act as key ambassadors in advancing health and educational equity in school settings. Delivered in two phases, the program consists of an online learning series, capacity-building assistance (CBA), followed by practice-enhancing technical assistance (TA). These components are designed to deepen participants’ understanding of key topics such as: (1) social determinants of health; (2) adolescent neuroscience and the impact of chronic stress on learning and behavior; and (3) strategic partnerships (including those with youth) for advancing shared goals. In addition, the program aimed to build participants’ capacity for identifying and responding to the root causes of issues facing their students at the schoolwide and systems levels. TA offers half-day professional development workshops on motivational interviewing in partnership with Possibilities for Change, LLC and chronic stress in partnership with the Center for Health and Health Care in Schools. Needs assessments developed and delivered in the program include the Rapid Assessment for Adolescent Preventive Services — Public Health (RAAPS-PH) (in partnership with Possibilities for Change, LLC), discussion groups with students and school-linked professionals, and school-community environmental scans.

Before the program, participating schools were not routinely assessing the prevalence of health, social, behavioral and academic risk factors affecting their entire student bodies. Through the needs assessments, schools found that over one-quarter of their students experience stress-inducing circumstances and mental health symptoms. Key examples include feeling hopeless, neglected, misunderstood, unsafe and fearful in the school and community and having issues with anger, aggression and suicidal ideation. Armed with this information and the intensive technical assistance provided by CSHE, schools became better equipped to focus on population-level prevention and intervention.

Since 2013, the program has reached over 600 professionals across 15 schools, SBHCs, local health departments, community organizations and other agencies, which together have responsibility for over 15,000 students.

Progress in institutionalizing practice and policy changes that reduce the impact of graduation barriers represents varying degrees of success along a continuum — from paradigm shifts among staff, to visible and palpable changes within the school building, to direct impacts on students inside and outside of the classroom.

Aggregated findings suggest that program participants generally left with a firm grasp of the information presented and felt prepared to advance changes in practice.

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*Includes professionals consistently engaged and responsible for leading all programmatic activities at a selected school, as well as others who supported certain activities. In most cases, the school-based health center (SBHC) manager, a SBHC sponsoring organization administrator and one or more appointed school or clinic staff members were leading activities. In ideal cases, the school principal (and/or designated liaison) was also consistently involved. Additional strategic partners from community agencies and with other backgrounds were involved in certain meetings and activities at the schools.*
Address the social, emotional & behavioral health of disadvantaged school-aged youth

Encourage healthier eating &/or lifestyle changes

Implement schoolwide strategies that promote resiliency & healthier management of social stressors among students

Implement strategies for communicating effectively with youth & motivate them toward positive behavior changes

Organize & coordinate a local project team to interpret & advise on strategic approaches

Use needs assessment results to set priorities (clinical, schoolwide, systems)

Note: Several limitations, including low survey response rates, prevent stronger conclusions from being made.

Ultimately, schools set a wide variety of priorities and implemented a range of responsive approaches, each based on the unique needs of the student population. Due to the dynamic nature of each school, several had initiatives and partnerships already in place when the program began. In these cases, CSHE's efforts helped to support their expansion, formalization and/or continuation. In other instances, the approaches were implemented as a direct result of CSHE's program. Included below is a summary list of the priority-focused approaches in place. The vignettes, included in the full report, provide illustrations of school-specific achievements.

**Family and Community Engagement**
- Cooking demonstrations
- Healthy eating & active living education
- Catalog of local community relief services

**Social and Emotional Climate**
- De-escalation room
- Social & coping skills curriculum
- Peer juries & mentoring
- Movement breaks
- Staff self-care & well-being

**Life Skills Development**
- Mock interviewing
- Internships
- Career shadowing
- Experiential learning credits
- Advocacy & leadership

**Unmet Needs and Social Services**
- Food pantry
- Clothing pantry
- School garden
- Free & reduced-price lunch
- On-site showers & laundry facilities

**A focus on chronic stress**

"[Having food and washers and dryers] ... it's one less thing for these students to have to worry about. Our students come to school every day with a lot on their shoulders. ... It also helps them improve their nutrition which gets them more energy to stay present in the classroom, to stay awake. ... Our focus here [is] 100% attendance and graduation. ... [These resources] ensure that students are here and don’t need to leave this building for any other reason.” — School principal

Reducing chronic stress is paramount to the CSHE program model because of its destructive cycle of wear and tear on students’ bodies and the resulting increased likelihood of adverse psychosocial and behavioral responses that disrupt learning and push students out of school.
RAAPS-PH enabled schools to quantify prevailing indicators of chronic stress such as anger and aggression. The prevalence of these indicators across all schools elevated the need for a priority focus on how behavior would be addressed among youth-serving professionals accustomed to reacting to behavioral disruptions with punitive measures. The program applies findings from the latest research in adolescent neuroscience to explain how students in urban communities become chronically stressed and might behave in the classroom and school building. Through the program, participants begin to understand how prolonged exposure to inequities such as discriminatory practices, high community crime and familial financial hardship can lead to fear, anxiety and depression in students. As a result, students might exhibit an increase in impulsive or risk-taking behaviors, difficulties maintaining attention and concentration, and — particularly in boys — hostility, aggression and violence. The uneven distribution of social, economic and other basic resources needed for students to thrive stems from structural racism and discrimination against non-white persons and occurs at the same time as typical adolescent stressors. This cycle deals a toxic blow to students’ development in urban cities.3,4

A benefit of the program was increasing the likelihood that professionals would shift their perspectives from “what’s wrong with you?” to “what happened to you?” This helped them to reduce the application of punitive interventions and move upstream to address the root causes of students’ disruptive behaviors with restorative and social-emotional learning practices. As one high school student expressed, “We need more people to talk to [us] to see how [we] are doing. Living in poverty, [we] bottle stuff up and eventually … explode; sometimes it’s not even with the person that made [us] mad.” One key to success: having youth engaged as key partners in the program through activities that enabled them to advocate for social change, have healthy outlets for expressing difficult emotions and inform decisions that affect them.

Remarkably, where the capacity was strongest to implement the program to scale, one school’s restorative and trauma-informed strategies (i.e., de-escalation room, peer jury program and social/emotional curricula) contributed to a reduction in anger and aggression (from 49% to 34%) among students over a two-year span. Other schools addressed chronic stress by mediating stress-inducing factors, incorporating neuroscience into instruction strategies and screening for adverse childhood experiences. Additional approaches helped students gain employment-related skills, earn income to contribute to family finances, and complete graduation credits.

Promising practices

The Program to Improve Graduation has evolved into a promising model for schools and their allies to interrupt conditions that cause students to drop out of school. Given the complexities of institutionalizing policies and practices that improve population-level outcomes in school settings, participants benefited from the strategic support that CSHE and other partners provided to help manage the scope and scale of transformation. Despite local expertise and readiness, prior to the program, neither the educators, the SBHC providers nor community partners were equipped to move beyond silos or collaboratively advance systems change.

Collaboration was most successful in schools with proactive and visionary administrators who received unwavering support from internal and external partners. This enabled participants to make significant strides in the program despite unavoidable setbacks.

Several schools implemented policy and systems level changes. For example, two schools changed their policies to ensure that students eating a late breakfast would no longer be marked tardy.

At an elementary school, a fresh produce garden is beginning to address food insecurity and unhealthy dietary behaviors, while also strengthening relationships between students and staff. Among fifth graders, 78% reported that they were more likely to eat fruits and vegetables because they worked to help grow the produce, and 81% were excited to harvest the garden. Families reported positive feedback as a result of the produce being available to take home. Staff reported increased interactions with students as a result of their participation and have plans for expanding school gardens across the district.

At another school, staff received training on how to develop stronger relationships with students and enhance their social/emotional coping skills, which led to their advocacy efforts to increase a focus on chronic stress across the district. Bullying
prevention initiatives like No One Eats Alone and student-engaged theatrical plays instituted at the schoolwide and systems levels in elementary schools were effective in: (1) addressing students’ interpersonal and intrapersonal feelings of loneliness or isolation; (2) increasing students’ communication and stress management skills; (3) reducing behavioral disruptions; and (4) reducing teachers’ stress.

As a result of a strengthened focus on staff-student relationships, a high school in California achieved a reduction in chronic absenteeism rates from 24.5% to 11.3% over a two-year span. They primarily credit their success to the principal’s lead role in modeling healthy and supportive relationships and fostering an environment where secure attachments are prioritized. Through these and similar efforts, all 10 schools that completed the program showed signs of increasing capacity to deliver the program’s model as intended.

**Sustainability**

All schools had at least one programmatic initiative that was sustainable after CSHE’s intensive support ended. Sustainability was defined as having one or more of the following elements: (1) strong partnerships with external organizations; (2) engagement from stakeholders of various backgrounds; and (3) transformational changes made to the school or community infrastructure that did not necessarily require continuous financial resources. For example, one school’s Chill Room and universally accessible laundry and shower spaces represent structures that are embedded in the school’s climate and will not require substantial resources for continued utilization. The school gardens that were established are another example as they contribute to increases in students’ consumption of fruits and vegetables and provide them with experiential learning beyond traditional education. Other initiatives thrive on cross-sector collaborations where resources are leveraged across partners to provide students with skills that will prepare them for graduation or life thereafter.

Some initiatives that have the potential to increase parent engagement and address intergenerational poverty were not sustainable due to substantial financial investments. For instance, the Leadership Scholars Program was piloted at a participating high school in Cincinnati and provided parents with transportation, meals, and childcare to support their engagement in life skills training activities. Ultimately, the program aimed to empower them to become catalysts for their children to attend and graduate from college. Likewise, the food pantries established across several schools will need continuous financial support to ensure that fresh and nutritious foods are accessible to the entire student population.

**Examples of school strategies for advancing equity**

A college in Miami, Cincinnati Public School District & Cincinnati Public Health Department partnered to boost minority numbers in high-demand professions. Through continuous engagement & exposure to college-readiness initiatives and programming, the initiative aims to matriculate local high school students into the college with the full cost of attendance covered.

Students Working on Occupational Pathways (SWOOP) offers paid internships to seniors not on track to graduate. Students engage in community improvement projects that translate into graduation credits as well as credentials and skills.

Impact: ↑ attendance, graduation, confidence, youth peer mentoring & parent engagement. Community partner has access to the student talent pool & meets its organizational goal of supporting educational attainment.

**Future directions**

Overall, the schools that partnered with CSHE are resilient and committed to advancing equity by ensuring their students graduate from high school despite the obstacles along the way. This was evidenced by their varied attempts to take on a complex new approach in their daily work, often without adequate support and resources.

Some schools were more primed for transformation by way of forward-thinking leaders who foster environments where continuous learning, multisector collaboration and innovations like the program’s model are met with little resistance. The best example: at the high school in Cincinnati where the climate fosters service learning, student leadership and civic
engagement opportunities for students. The stories about the impact of the student-led efforts such as the school that students built in a village in Largo, Sierra Leone, West Africa, and their newly established school-based coffee shop are forthcoming and worthy of recognition. For others, a small and mighty team is spurring changes in the thinking, practices or schoolwide culture as a result of its engagement in the program.

As a result of this work, it is clear that the actualization of longer-term impacts on student health and education requires additional time and sustained investment. Recognizing that schools are microcosms of society, all of the schools that participated aspire to create settings where education is prioritized by virtue of meeting students’ health, safety, cultural and social needs. By the end of the program, a school in California agreed that it was in its purview to partner with local restaurants to institute on-site paid employment opportunities for students. In Nebraska, the school recognized that it would need to investigate community conditions to truly understand the trends in absenteeism and tardiness data. GIS mapping and additional qualitative discussions will enable them to develop school policies that are informed by conditions (i.e., unsafe walking routes) that interfere with attendance.

Although the true extent of the program’s impact may not be evident for years to come, the successes achieved across participating schools indicate the potential and demand for broader disruption of the dropout crisis. Ultimately, we know that schools cannot and should not shoulder this work alone.

Looking ahead, CSHE plans to further evolve its model by going beyond the school walls to strengthen school-community partnerships to improve the conditions that influence student outcomes. These efforts will be informed by the needs and priorities of schools, and they will build on the progress schools have made toward systems-level change.

At the national level, CSHE will continue to elevate the importance of a public health role (among a network of actors) in advancing equity in school settings. Despite recognition of the connections between education and health, the two disciplines largely operate in silos at the national, state and local levels.

Over time, by integrating essential public health services into schools, we have the potential to improve high school graduation rates among those most vulnerable to dropping out. When we prioritize educational attainment for all groups, we increase gateways to strengthen America’s social and economic well-being.
The American Public Health Association champions the health of all people and all communities. We strengthen the public health profession. We speak out for public health issues and policies backed by science. We are the only organization that combines a nearly 150-year perspective, a broad-based member community and the ability to influence federal policy to improve the public’s health. APHA publishes the American Journal of Public Health and The Nation’s Health newspaper. At our Annual Meeting and Expo, thousands of people share the latest public health research. We lead public awareness campaigns such as Get Ready and National Public Health Week. Together, we are creating the healthiest nation in one generation. Learn more at www.apha.org.