

## Coordinated School Health Programs ~ Background & Research<sup>1</sup>

Primary and secondary school education has undergone a transformation during the past two decades. States and school districts nation wide have struggled to develop initiatives to improve student achievement. While we as a nation have spent a great deal of time and effort to raise expectations and develop standards for student achievement, health is another critical issue that requires more immediate attention by educators, nation wide.

Good health is **necessary** for **academic success**. Like adults at work, students at school have difficulty being successful if they are depressed, tired, bullied, stressed, sick, using alcohol or other drugs, hungry, or abused. Coordinated School Health Programs (CSHP) are a solution. Fully implemented CSHP can help students succeed academically while improving their short- and long-term health status. Both research and intuition tells us that when students are fit, healthy, and ready to learn, they achieve more success in all areas of their lives.

Effective CSHP do not add more work to school buildings and districts. They help staff do business differently, more collaboratively, by involving parents, teachers/staff, students, and communities to help identify and resolve health concerns. This collaborative approach is designed to promote student success by helping students establish and maintain healthy, personal and social behaviors to improve student knowledge about health and develop personal and social skills that assist them in making smart choices in school and in life.

According to the Centers for Disease Control and Prevention (CDC), Division of Adolescent and School Health, “Schools by themselves cannot, and should not be expected to, address the nation’s most serious health and social problems. Families, health care workers, the media, religious organizations, community organizations that serve youth, and young people themselves also must be systematically involved. However, schools could provide a critical facility in which many agencies might work together to maintain the well-being of young people...”

### The History of Coordinated School Health Programs

In 1987, the CDC first proposed the concept of a coordinated school health program. True coordinated school health programs consist of eight separate but interconnected components. Many of these components exist in every school, but they are often not formally linked in a coordinated way. Active family and community involvement is critical to the success of any coordinated school health program. The following is a list of the eight components and their role in student health:



<sup>1</sup> Much of the language in this document was provided by the Association of State and Territorial Health Officials and the Society of State Directors of Health, Physical Education and Recreation (2002). *Making the connection: health and student achievement*. Washington, DC: The Association of State and Territorial Health Officials and the Society of State Directors of Health, Physical Education and Recreation.

1. **Health Education** provides critical health information to students.
2. **Physical Education** instructs students on how to be physically active for life.
3. **Health Services** provide essential health care, enabling students to stay healthy, prevent injuries, and improve academic achievement.
4. **Family/Community Involvement** enables students to be supported by the larger community.
5. **School Counselors, Psychologists, and Social Workers** attend to students' mental health needs.
6. **Nutrition Services** provide a healthy nutrition environment, including good breakfast and lunch programs.
7. **Healthy School Environment** provides a building that is safe and conducive to learning and a school climate that ensures all feel safe, supported, and free from harassment or surroundings that may be detrimental to health.
8. **Health Promotion for Staff** improves staff personal health behaviors and provides positive personal examples that reinforce positive student health behaviors.

To be effective, CSHP must be directed toward the needs of students and staff, responsive to the needs of families, and reflective of community values. All eight components must be linked to and supportive of one another. Often, schools with effective coordinated school health programs develop a committee of representatives from each component area. The committee meets to develop school health priorities and programs to address student needs. Many school districts employ a coordinator who works to optimize the connections between the eight separate component areas to prevent duplication of services and to seek additional resources.

As the school reform movement has taken shape over the past two decades, the components of coordinated school health programs have been shown to have an impact on student success in school. The following is a list of each of the eight component areas and the research that illustrates how they contribute to healthy behaviors and improved academic achievement. A short definition of the component precedes the research of each area.

1. **Health Education:** Comprehensive school health education is age-appropriate curriculum and instruction designed to address all aspects of health, including the physical, mental, emotional, and social dimensions, and is designed to increase students' knowledge and their ability to use that knowledge to make healthy decisions. Students who receive comprehensive school health education increase their health knowledge and improve their health-related skills and behaviors.<sup>2</sup> Curricula that have research indicating effectiveness have been proven to assist students in establishing and maintaining healthy behaviors.<sup>3 4</sup> For example, a study of third and fourth grade students that included a control group of students who did not receive comprehensive school health education and an experimental group that did showed that students who received comprehensive school health education scored higher than the control group on assessments in reading and mathematics.<sup>5</sup>

<sup>2</sup> Connell, D., Turner, R., and Mason, E. (1985). Summary of findings of the school health education evaluation: Health promotion effectiveness, implementation, and costs. *Journal of School Health*, 55(8), 316-321.

<sup>3</sup> Botvin, G.J., Griffin, K.W., Diaz, T., Ifill-Williams, M. (2001). Preventing binge drinking during early adolescence: one-and two-year follow-up of a school-based preventive intervention. *Psychology of Addictive Behaviors*, 15(4), 360-365.

<sup>4</sup> Dent, C., Sussman, S., Stacy, A., Craig, S., Burton, D. Flay, B. (1995). Two-year behavior outcomes of project towards no tobacco use. *Journal of Consulting and Clinical Psychology*, 63(4), 676-677.

<sup>5</sup> Schoener, J., Guerrero, F., and Whitney, B. (1988). The effects of the Growing Healthy program upon children's academic performance and attendance in New York City. Report from the Office of Research, Evaluation and Assessment to the New York City Board of Education.

2. **Physical Education:** Some schools are reducing time for recess and physical education in response to demands to improve students' academic performance. Ironically, this shift in school time allocation may be having the opposite effect on academic achievement. Research shows that school-based physical activity programs can help students increase concentration, reduce disruptive behaviors, and improve scores in mathematics, reading, and writing. In two separate controlled studies, class time for academics was reduced by about 250 minutes per week in the experimental groups to increase exposure to physical education. In both studies, academic test scores were either improved or unchanged when compared to control groups that did not have increased time for physical activity. Research also suggests a critical relationship among movement/attention, spatial perception, and learning/memory in youth and adults, including those with special needs. Beyond the academic benefits, physical activity and physical education contribute to the maintenance of positive interpersonal relationships and reduce the incidence of depression, anxiety, and fatigue. Vigorous physical activity can help reduce anxiety, tension, depression, and reaction to stressors.<sup>6</sup>
  
3. **Health Services:** When most people think of school health services, they think of physical health and the school nurse. Local district employed school nurses are still the most effective method of delivering health services to students in school. More schools are entering into partnerships with a community health provider, such as a hospital or health department, and contracting with them for nursing services. Schools are also partnering to deliver student health services through an on-site health center. This is especially true where access to primary health care is very limited for the school-age population. School health service programs provide emergency/urgent care, medication administration, case management for students with chronic health conditions, and a host of preventative services, including immunizations and health education. These programs can make a major impact on the students' health and their ability to succeed in school. This impact is reflected in better attendance, decreased dropouts and suspensions, and higher graduation rates.<sup>7 8</sup>
  
4. **Family/Community Involvement:** As most educators know, when supportive parents are involved in their children's education, they are more likely to get better grades, score better on standardized tests, show up for school regularly and on time, and complete their assigned homework.<sup>9 10</sup> When teachers and parents work in partnership, they can provide the support required and accountability necessary for student success. Student participation in community activities can support classroom learning in significant ways. In two separate studies, community activities were shown to positively impact academic achievement, reduce school suspension rates, and improve school-related behaviors.<sup>11 12</sup> The increased interest in co-curricular, extracurricular, and after-school programs that are supported by community initiatives, recognizes the positive impact on student involvement. Coordinated school health programs can provide the necessary linkages to ensure that these programs support, rather than compete with, the school's objectives for student achievement.

<sup>6</sup> Michigan Department of Education. (2001). *The Role of Michigan Schools in Promoting Healthy Weight: A Consensus Paper*. Available online at: <http://www.michigan.gov/mde> or <http://www.emc.cmich.edu>.

<sup>7</sup> McCord, M., Klein, J., Foy, J., & Fothergill, K. (1993). School-based clinic use and school performance. *Journal of Adolescent Health*, 14(2), 91-98.

<sup>8</sup> A comparison of absentee/attendance rates in high schools with and without school based health clinics. Thesis submitted to Michigan State University.

<sup>9</sup> National Committee for Citizens in Education. (1987). *The Evidence Continues to Grow: Parental Involvement Improves Student Achievement*. Ed. Anne Henderson. National Committee for Citizens in Education: Columbia, MD.

<sup>10</sup> Shaver, A.V. and Walls, R.T. (1998). Effect of Title I Parent Involvement on Student Reading and Mathematics Achievement. *Journal of Research and Development in Education*, 31(2), 90-97.

<sup>11</sup> Community involvement and disadvantaged students: A review. *Review of Educational Research*, 61(3), 379-406.

<sup>12</sup> Allen, J. P., Philliber, S., Herrling, S., and Kupermine, G. P. (1997). Preventing teen pregnancy and academic failure: Experimental evaluation of a developmentally based approach. *Child Development*, 64(4), 729-742.

5. **School Counselors, Psychologists, and Social Workers:** This group works in concert with other school and community professionals to provide appropriate assistance for students and their families. Effective programs focus on prevention, address problems, facilitate positive learning and healthy behavior, and enhance healthy student development. In one study, a comprehensive intervention had a significant and positive impact on student achievement over time. This intervention resulted in enhanced student commitment and attachment to school, less social misbehavior, and improved academic achievement.<sup>13</sup>
6. **Nutrition Services:** School nutrition services involve much more than school lunches. An effective program integrates an appealing meal program with nutrition education and a food environment that promotes healthy eating. School nutrition is focused on lifelong benefits. Ensuring that schools offer nutritious, appealing choices whenever and wherever food and beverages are available on campus is an important policy objective of many federal and state programs. Hunger not only impacts health but also affects students' academic achievement in profound ways. In national health data, children ages six to 11 who reported not having enough food to eat were more likely to have significantly lower mathematic scores, were more likely to have repeated a grade, were more likely to have seen a psychologist, and were more likely to have had difficulty getting along with other children. In teenagers, the results were dramatic: they were more than twice as likely to have seen a psychologist, almost three times as likely to have been suspended from school, almost twice as likely to have difficulty getting along with others, and four times as likely to have no friends.<sup>14</sup> The findings speak to the critical need for school nutrition programs so that students can thrive in and out of the classroom.
7. **Healthy School Environment:** A positive school climate and safe school facilities are both important for student success. One study noted a link between school facilities and academic performance.<sup>15</sup> The study found that the physical environment of the school could be either a support or a hurdle to student achievement. As with adults in their workplaces, students perform better in facilities that are attractive, functional, safe, and secure. The social and emotional climates of the school are equally critical to students' academic success. Students must feel support from parents, administrators, teachers, and peers to achieve their full potential. The importance of connections to parents and school are the two most important factors in healthy, social development for children and youth. In one study, students who develop a positive affiliation with school are also more likely to remain academically engaged and less likely to be involved in misconduct at school.<sup>16</sup> Another vitally important facet is to prevent exposure to biological or chemical agents that may be detrimental to health. For example, students and staff who have asthma or allergies may be sensitive to the presence of animals in the classrooms, dust, cleaning fluids, markers, or perfumes. The air quality in schools should be monitored for molds, dust and proper humidity.

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<sup>13</sup> Hawkins, J., Catalano, R., Kosterman, R., Abbott, R., and Hill, K. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatric Adolescent Medicine*, 153, 226-234.

<sup>14</sup> Murphy, J., Pagano, M., Nachmani, J., Sperling, P., Kane, S., and Kleinman, R. (1998). The relationship of school breakfast to psychosocial and academic functioning. *Archives of Pediatric Adolescent Medicine*, 152, 899-907.

<sup>15</sup> Building conditions, parental involvement, and student achievement in the District of Columbia public school system. *Urban Education*, 28(1), 6-29.

<sup>16</sup> Simons-Morton, B., Crump, A., Haynie, D., and Saylor, K. (1999). Student-school bonding and adolescent problem behavior. *Health Education Research*, 14(1), 99-107.

8. **Health Promotion for Staff:** By encouraging staff to practice healthy behaviors at school, improve their personal health and practice healthy behaviors, administrators, teachers, and other staff members not only enhance their own well-being but also become role models for the students in their care. This type of reinforcement is critical to sustaining healthy behaviors for both adults and students. Many school-site health promotion programs focus on promoting physical activity for staff. The health benefits of regular physical activity are well documented and include stress reduction, maintenance of healthy weight, an improved sense of well-being,<sup>17</sup> fewer sick days and generate less health insurance cost due to illness. Students benefit from having healthy teachers because their teachers are more energetic and absent less often. This means more days with their regular teacher in the classroom rather than a substitute teacher. Healthy adults in the school also contribute to a positive and more optimistic environment.<sup>18</sup>

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<sup>17</sup> Blair, S., Collingwood, T., Reynolds, R., Smith, M., Hagan, D., and Sterling, C. (1984). Health promotion for educators: Impact on health behaviors, satisfaction, and general well-being. *American Journal of Public Health*, 74(2), 147-149.

<sup>18</sup> Symons, C.W., Cummings, C.D., Olds, R.S. (1994). Healthy People 2000: An agenda for school site health promotion programming. In: Allensworth, D.D., Symons, C.W., Olds, R.S. Healthy Students 2000: An Agenda for Continuous Improvement in America's Schools. Kent, OH: American School Health Association, 1994.