EQUITY MATTERS: Research Review No. 6

Healthier Students Are Better Learners:

A Missing Link in School Reforms to Close the Achievement Gap

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March 2010

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EXECUTIVE SUMMARY

No matter how well teachers are prepared to teach, no matter what accountability measures are put in place, no matter what governing structures are established for schools, educational progress will be profoundly limited if students are not *motivated and able to learn*. Health-related problems play a major role in limiting the motivation and ability to learn of urban minority youth, and interventions to address those problems can improve educational as well as health outcomes. Healthier students are better learners. Recent research in fields ranging from neurosciences and child development to epidemiology and public health provide compelling evidence for the causal role that *educationally relevant health disparities* play in the educational achievement gap that plagues urban minority youth. This is why reducing these health disparities must be a fundamental part of school reform.

School leaders must prioritize how to use scarce resources to address the critical health problems affecting youth. In this essay, three criteria were used for establishing priorities: prevalence and extent of health disparities negatively affecting urban minority youth; evidence of causal effects on educational outcomes; and feasibility of implementing proven or promising school-based programs and policies to address the health problem. Based on these criteria, seven educationally relevant health disparities were selected as strategic priorities: (1) *vision*, (2) *asthma*, (3) *teen pregnancy*, (4) *aggression and violence*, (5) *physical activity*, (6) *breakfast*, and (7) *inattention and hyperactivity*. Many other health problems affecting youth are also important, and the particular health problems deemed most important in a given school or school district will vary.

The health factors specified in this essay affect a large proportion of American youth. Visual problems have been estimated to affect 20% of youth. Asthma affects an estimated 14% or 9.9 million youth under 18 years old. An estimated 8.4% of school-aged youth, 4.6 million, have received a diagnosis of attention-deficit/ hyperactivity disorder (ADHD), with millions more exhibiting symptoms that are below established diagnostic criteria but nonetheless adversely affect teaching and learning. One in three American female adolescents is expected to become pregnant. Aggression and violence are a pervasive part of daily life for American youth, including at school. The majority of school-aged youth do not meet recommended levels of daily physical activity. Millions of youth do not eat breakfast on any given day. Urban minority youth from low-income families are disproportionately affected by all of these problems. If these factors are not addressed, the benefits of other educational innovations will be jeopardized.

Educationally relevant health disparities impede motivation and ability to learn through at least five causal pathways: *sensory perceptions; cognition; connectedness and engagement with school; absenteeism;* and *dropping out*. The causal pathways themselves are interrelated: for example, the student who is struggling cognitively is likely to feel less connected and less inclined to attend, which will further undermine educational progress. The causal connections between *multiple* health factors and motivation and ability to learn will be greater than the effects of individual factors. This is based on the expectation that at least some variance would be additive. However, it is reasonable to believe that the functional effects of reducing multiple impediments to motivation and ability to learn would be not only additive but also synergistic; therefore, school health programs must focus on multiple educationally relevant health disparities to maximize the educational yield from investments.

Schools cannot address all of the conditions that cause educational or health disparities, but proven and promising approaches exist and must

be applied to help close the achievement gap. Children should receive corrective care to enable them to see well enough to acquire basic academic skills. Children with poorly controlled asthma deserve in-school monitoring to help ensure that they receive high quality health care; a school that identifies and ameliorates allergens, irritants, and pollutants that trigger symptoms; and multiple opportunities for daily physical activity. Children need to learn and practice communication and social skills, such as resisting social pressures and negotiating to minimize interpersonal conflict and maximize cooperation, which can reduce risk for various health-compromising outcomes, including unintended pregnancy. For youth who are sexually active, contraceptive services should be available. For youth who become pregnant, targeted health and social services are essential if there is to be any hope of interrupting the intergenerational transmission of poverty.

Children have the right to attend a school that is safe. Progress in achieving this goal will be greatly influenced by the school climate and school connectedness. Measures of school climate and school connectedness should become a norm within measures of accountability—if the school climate is poor, connectedness and engagement in school will be less likely, which in turn will adversely affect educational as well as health outcomes. Youth who exhibit disruptive or aggressive behavior need attention during the early stages of development of these behaviors. Youth have the right to multiple daily opportunities for physical activity and to daily breakfast. Youth with attention and hyperactivity problems need help in learning ways to improve their mental and behavioral performance and, when parents and pediatricians agree, pharmacological treatment.

Most schools are already devoting some attention and resources to addressing important health barriers to learning, but these efforts are too often poor quality, not strategically planned to influence educational outcomes, and not effectively coordinated to maximize linkages between different school health components. Despite compelling evidence linking health and academic achievement, there is no U.S. Department of Education initiative to reduce educationally relevant health disparities as part of a national strategy to close the achievement gap. For the nation's schools to address educationally relevant heath disparities in a strategic and coordinated way, there must be fundamental change in the goals of schools, the way schools are financed, the personnel and services available, and the amount of time devoted to help youth learn social-emotional skills. Such change will not occur without leadership from the U.S. Department of Education. Now is an opportune time for such leadership.

National, state, and local strategies for helping schools implement high quality, strategically planned, and effectively coordinated school health programs are presented. These include policy development; guidance, technical assistance, and professional development; accountability supported by data and software systems; and priorities for a national research agenda. Even if health factors had no effect on educational outcomes, they clearly influence the quality of life for youth and their ability to contribute and live productively in a democratic society. Improving the health of youth is a worthy goal for elementary and secondary education. Indeed, pursuing this goal is a moral imperative.