

## Chapter 4

# Recommendations for Putting Research into Action



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Previous chapters of this update have discussed research on the relationship between aspects of student health and academic success and between supportive

academic environments and student success. Several recommendations for action follow from these discussions.

## *Strategies to Promote Healthy Behaviors*

Policymakers need to focus on eliminating barriers that affect low-performing students' readiness to learn. Among these barriers are physical and mental health conditions that impact students' school attendance and their ability to pay attention in class, control their anger, and restrain from self-destructive impulses.

*Improving Academic Performance by Meeting Student Health Needs (2001)*

The following conclusions are derived from research findings:

- Addressing the developmental needs of youths—ensuring that youths are safe, drug-free, healthy, and resilient—is a critical component of a comprehensive strategy for meeting the accountability demands for improved academic performance.

- Students in elementary school through high school perform better academically when they are physically active. Studies have demonstrated that physical activity is connected to physiological aspects of cognitive functioning. Increases in physical education time with reductions in academic instruction time have favorable effects on students' academic achievement. Consequently, schools that attempt to increase academic instructional time at the expense of physical education time may have reductions in student learning and academic performance.
- There is a direct link between nutrient supplementation and cognitive performance. Missing breakfast has been found to be associated with reduced cognitive performance among nutritionally at-risk children, and several experimental studies have shown that it reduces performance on a variety of cognitive tests among otherwise well-nourished, middle-class children as well. Conversely, studies also show

that participation in school breakfast programs is associated with significant improvements in academic functioning—particularly among low-income or poorly nourished children.

- Schools that provide health services to students promote student achievement through lower absenteeism and dropout rates as well as promote learning gains and improved student attitudes.
- Crime, violence, antisocial behavior, and other types of social disorder on school campuses may have adverse consequences on student learning.

Because of these research findings, district and school leaders can take the following steps to promote student health and well-being:

- Increase student access to moderate to vigorous physical activity in physical education classes.
- Monitor the nutritional content of food offered at school.
- Offer nutritious breakfasts at school.
- Promote greater awareness among students about their physical health and nutrition.
- Remedy substance use, school violence, and antisocial behavior with comprehensive prevention programs.<sup>10</sup>

District and school leaders can efficiently address elements shown by research to be related to academic success by implementing a coordinated school health program.

### *Strategies to Prevent Unhealthy Behaviors*

The following conclusions are derived from research studies:

- Adolescent use of alcohol, tobacco, and other drugs and academic performance are reciprocally related to each other—substance use appears to reduce subsequent academic performance, and poor academic performance seems to increase subsequent substance use. Substance use is also related to reduced attention spans, lower investment in homework, more negative attitudes toward school, lower motivation, and increased absenteeism. A longitudinal study found drug and tobacco use had a negative effect on standardized achievement test scores.
- Substance use is strongly related to a school's academic performance. Schools with many students who use substances or report being intoxicated on school property and schools with large percentages of students who report being offered drugs on school grounds exhibit lower API scores than do other schools.
- Regardless of socioeconomic makeup, schools with proportionately high numbers of students who perceive that their school is safe have higher API scores than do other schools. Reports of

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<sup>10</sup> The *Health Framework for California Public Schools* (2003) and *Safe Schools: A Planning Guide for Action* (2002) are useful resources for a coordinated health program. Both publications are available from the California Department of Education.

harassment, stolen or damaged property, and physical fights at school were not significantly related to API scores. API scores were significantly lower, however, in schools with a high percentage of students who reported being threatened with a weapon on school property.

District and school leaders can take the following steps to prevent unhealthy behaviors:

- Institute developmentally appropriate, effective (science-based) prevention programs for youths, especially programs that show an impact on academic success (see the Appendix for a list of programs).
- Implement and enforce school policies on alcohol, tobacco, and other drug use; bullying, harassment, fighting, and other antisocial behavior; and possession of weapons.

### Recommendations for Creating School Communities That Foster High Academic Achievement

Engage students, school staff, and the surrounding community to create and maintain schools in which students feel connected, respected, safe, and supported.

Implement state and district standards and measures to support continual improvement together with developing safe and supportive learning communities that help high academic achievement to flourish.

Create professional development for all school staff to provide students with strong academic programs and manage classrooms that promote instruction and learning and result in student cooperation and engagement.

Create and maintain structures and supports for social relations, safe physical settings, and services for students who need them.

Learning First Alliance, *Every Child Learning: Safe and Supportive Schools* (2001)

## Strategies to Improve School Climate

The following conclusions are derived from research studies:

- As external resilience assets in youths (caring relationships, high expectations, and meaningful participation) go up, the school's API goes up.
- School connectedness (feeling part of one's school and feeling close to people at school) is positively related to grade point average in major school subjects. Lack of connectedness is correlated with a variety of problem behaviors.
- A sense of community in school is positively associated with a range of positive academic attitudes and dispositions. The strongest correlations are with attitudes toward school (e.g., liking for school, enjoyment of class), academic expectations (e.g., expectations of success), and academic motivation and engagement (e.g., intrinsic academic motivation).
- Community-building programs must be consistently implemented throughout a school, over a period of several years, to have broad and enduring effects.
- Community building may be insufficient, especially among low-income students and students of color, unless complemented by academic press—a set of strong

norms and expectations in the school encouraging academic effort and achievement.

School and district leaders can take the following steps to improve school climate:

- Build community in schools by implementing an effective (science-based) program that shows the effects of creating a supportive school environment. These programs emphasize:
  - Setting predictable expectations and consistently and fairly using rewards and punishments
  - Encouraging students' active participation in school and classroom decision making and planning
  - Providing opportunities for students to interact with one another, be self-directing, and have experiences of success
- Implement community-building programs throughout a school over a period of several years. However, changes in personnel, leadership, and external influences in many schools, as well as internal politics and inertia, can make achieving such consistency over the years a significant challenge.
- Complement community building with strong norms and expectations by teachers, administrators, and parents for academic effort and achievement. Together these norms and expectations comprise academic press. Academic press requires a school's staff to come to know each student; to track each student's learning in an ongoing way; and to communicate high expectations to ensure further growth by all students.
- Provide academic support to the full range of students by presenting challenging and engaging learning opportunities to complement community building and academic press.

### *Strategies for Effective School Organization and Pedagogy*

The following conclusions are derived from research:

- School organizational variables most important to academic success are effective classroom management; quantity of instructional time; positive and productive student/teacher interactions; a classroom climate conducive to learning; and a peer culture supportive of academic achievement.
- Students also need metacognitive learning skills that guide the "learning-to-learn" process.

School and district leaders can take the following steps for effective school organization and pedagogy:

- Create positive classroom environments that maximize all students' academic engagement and ultimate success. In doing this, teachers and other support staff also build the instructional and curricular infrastructure that wraps around students so that their academic, social, emotional, and behavioral progress is continually tracked and evaluated against explicit goals and/or outcomes.
- Couple realistic and high expectations with supportive school environments, appropriate instructional levels, effective teachers, administrative backing, and positive involvement of the home and community.

Project ACHIEVE, developed by researcher Howard Knoff, is a school reform and school effectiveness program for use in preschool, elementary, and middle schools, with students 3 to 14 years old. It works to improve school and staff effectiveness and emphasizes increasing student performance in areas of social skills and social-emotional development; conflict resolution and self-management; achievement and academic progress; and positive school climate and safe school practices.

The program shows evidence of many student academic outcomes. A comparison of prior-year data with the averages from eight years of program implementation at one of the studied schools showed academic gains in reading, math, and language on the *California Test of Basic Skills (CTBS)*.

In addition, this study showed that:

- Out-of-school suspensions decreased 29 percent.
- Grade retentions decreased 47 percent.
- Special education referrals decreased 61 percent.
- Special education placements decreased 57 percent.
- Disciplinary referrals to the principal's office decreased.
- School bus disciplinary referrals decreased.

## References

Center for Health and Health Care in Schools. (2001). *Improving academic performance by meeting student health needs*. Washington, DC: author.

Learning First Alliance. (2001). *Every child learning: Safe and supportive schools*. Washington, DC: Association for Supervision and Curriculum Development.

