

## USING THE CHKS TO HELP IMPROVE SCHOOLS AND STUDENT ACHIEVEMENT

The *California Healthy Kids Survey (CHKS)*, a comprehensive risk and resilience student survey, offers schools an important new tool to help improve the school environment and student achievement. The current emphasis on academic outcomes often ignores the question of just how these outcomes will be accomplished. How do schools engage, motivate, and support students so that they can achieve? Ensuring that students are safe, drug-free, healthy, and resilient is central to improving academic performance. Growing numbers of children are coming to school with a variety of health-related problems that make successful learning difficult, if not impossible.<sup>1</sup> Research studies and reviews over the past decade have consistently concluded that student health status and achievement “are inextricably intertwined.”<sup>2</sup> Incorporating health and prevention programs into school improvement efforts produces positive achievement gains.<sup>3</sup>

The CHKS provides data to assess and monitor the health-risk and problem behaviors that research has identified as ***important barriers to learning*** among students, including those related to school climate. These barriers include:

- Chronic alcohol, tobacco, and other drug use, including use at school;
- The adverse effects of alcohol and drug use on school work and behavior;
- Violence, victimization, and harassment at school (including carrying weapons); and
- Physical health indicators linked to achievement, such as eating breakfast and exercise.

The CHKS assesses ***school connectedness*** as well as other ***assets*** that research has consistently identified as promoting positive youth development and school success. It provides data on:

- The degree to which youth have caring relations with adults, are held to high positive expectations, and are given meaningful participation opportunities in the school, as well as in the home and community.
- The individual resilience traits of cooperation and communication, empathy, problem-solving, self-efficacy, self-awareness, and achievement or goal motivation among students.

A key point borne out in the seminal National Longitudinal Study of Adolescent Health and other research is that youth development and successful learning are not competing goals but rather complementary or even synergistic processes. Students’ capacity for learning cannot be optimally engaged if their basic developmental needs — such as love, belonging, security, respect, identity, power, mastery, and meaning — are not being met. As Nel Noddings has observed:

*It is clear that when schools focus on what really matters in life, the cognitive ends we now pursue so painfully and artificially will be achieved somewhat more naturally. It is obvious that children will work harder and do things...for people they love and trust.*<sup>4</sup>

Promoting youth development and resilience also reduces those risk behaviors, such as drug abuse and violence, which are known to adversely affect the school environment and serve as barriers to achievement. Connectedness with schools has been found to be the most salient, cross-cutting **protective factor** in youths' lives beyond the family.<sup>5</sup> It was strongly linked to both higher rates of school achievement and lower rates of substance use involvement in the National

Cross-Site Evaluation of High Risk Youth Programs.<sup>6</sup> By the same token, a World Health Organization study showed it was one of the most important determinants of students' health habits. Moreover, teachers are often identified as the turnaround people who tip the scale from risk to resilience for challenged youth. A sound mind goes hand in hand with a sound body.

The CHKS targets grades 5, 7, 9, and 11, although it can also be used to survey other grades. Built around a general core and six supplementary modules (listed below), it can easily be customized to meet local needs and standards. Additional questions for evaluating school reform and prevention efforts can be included in a custom module. The California Department of Education supports full-service technical assistance to California's schools in planning, administering, and processing the survey under a contract with WestEd. For more information, call the toll-free CHKS helpline, 1.888.841.7536, or visit the website at [www.wested.org/hks](http://www.wested.org/hks).

### ***Staff School Climate Survey***

*No Child Left Behind (NCLB)* mandates that schools that receive federal Safe and Drug Free Schools and Community (SDFSC) funds must conduct an anonymous teacher survey of the incidence, prevalence, and attitudes related to drug use and violence. To help school districts meet this requirement, as well as meet their own school-improvement data needs, CDE has developed a *Staff School Climate Survey* as a companion to the California Healthy Kids Survey (CHKS) student survey. Starting the 2004-05 school year, CDE will require that all LEAs administer this survey at the same time as they administer the CHKS to students. The survey gathers information from school staff that, in conjunction with CHKS student data, will enrich a school/district's ability to understand and address the impact of substance use, violence, truancy, and other risk behaviors on the students and the school. To further enhance the survey's value to school improvement efforts, it includes general school-climate questions relevant to academic achievement, school connectedness, learning supports, and health-related learning barriers.

***Districts may also add questions of their own choosing as a custom feature.***



# Recent Research on Health and Achievement

## *Substance Use*

- Adolescents who use drugs have been found to have: reduced attention spans, lower investment in homework, lower grades, more negative attitudes toward school, increased absenteeism, and higher dropout rates. When controlling for socioeconomic status and personality variables, drug use also may directly predict dropping out of school.<sup>7</sup>
- Five years after being taught a substance use prevention curriculum, students had higher overall academic achievement scores than their national peers.<sup>8</sup>
- Even low levels of alcohol and drug use by peers in middle schools were linked to lower individual Washington Assessment of Student Learning test scores compared to students whose peers had little or no substance use involvement.<sup>9</sup>

## *Violence*

- Emerging evidence suggests exposure to violence has lifelong effects on learning.<sup>10</sup>
- Coping difficulties, associated with stress-related violence both at school and at home, threaten academic performance, exhibited by lack of interest and behavior problems at school, low grades, low self-esteem, and a high dropout rate.<sup>11</sup>
- Children who witness chronic violence have been found to exhibit poor concentration, shorter attention spans, and a general decline in academic performance.<sup>12</sup>
- Exposure to neighborhood and school violence contributed significantly to the prediction of school attendance, behavior, and grades among a sample of secondary school students.<sup>13</sup>

## *Teen Pregnancy*

- Childbirth during the high school years is associated with significantly reduced academic achievement and other positive educational outcomes.<sup>14</sup>

## *Exercise*

- Schools that offer intense physical activity programs have shown positive effects on academic achievement: increased concentration; improved mathematics, reading, and writing test scores; and reduced disruptive behavior; even when the physical education reduces the time for academics.<sup>15</sup> In one program, when academic class time was reduced by 240 minutes per week to allow for increased physical activity, mathematics test scores were consistently higher than for those not in the program.<sup>16</sup>

## *Nutrition*

- Schools that offer breakfast programs see increases in school grades and improvements in classroom behaviors (attendance, participation, etc.).<sup>17</sup>
- Sixteen Boston schools that offered free breakfast to every student, regardless of income, experienced higher math grades, lower absenteeism, and improved behavior.<sup>18</sup>

## *Mental Health*

- School-based mental health services have been linked to a decrease in course failures, absences, and disciplinary referrals, as well as an increase in grade point averages.<sup>19</sup>

## Skills Training

- In a study of 259 high-risk secondary students, participants in a life-skills class showed increased grade point averages (GPAs) while the GPAs of non-participants stayed essentially the same.<sup>20</sup>
- Schools that enhance child skill development through health education, parenting classes, and teacher training see increases in school connectedness and achievement.<sup>21</sup>

## References

- 
- <sup>1</sup> Council of Chief State School Officers (1998). *Incorporating health-related indicators in education accountability systems*. Washington, DC: the Council.
- <sup>2</sup> For recent general reviews, see Symons, C.W. et al. (1997). Bridging student health risks and academic achievement through comprehensive school health programs. *J School Health*, 67(6), 220-227. Marx, E., Wooley, S.F., & Northrup, D. (1998). *Health is academic: A guide to coordinated school health programs*. New York: Teachers College Press. Mitchell, M. (2000). Schools as catalysts for healthy communities. *Public Health Reports* 115(2-3), 222-227. Allensworth, D. et al. (1997). *Schools and health: Our nation's investment*. Washington, DC: National Academy Press.
- <sup>3</sup> As the National Governor's Association, Center for Best Practices, recently recommended: "To assist schools in ensuring that students come to school ready to learn, Governors can review the burgeoning research linking student health with student achievement and design data-driven programs. They can also provide technical assistance to help schools incorporate health into their curricula and increase interagency partnerships between the health and education communities"  
([http://www.nga.org/center/topics/1,1188,C\\_CENTER\\_ISSUE^D\\_356,00.html](http://www.nga.org/center/topics/1,1188,C_CENTER_ISSUE^D_356,00.html)). See also: NGA Center for Best Practices. (2000). *Improving academic performance by meeting student health needs*. NGA Issue Brief 10/13/2000 (<http://www.nga.org/cda/files/001013PERFORMANCE.PDF>).
- <sup>4</sup> Nodding, N. (1988, December 7). Schools face crisis in caring. *Education Week*, 32.
- <sup>5</sup> Resnick, M.D. et al. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *J American Medical Association*, 278, :823-832.
- <sup>6</sup> Springer, F. et al. (in press). Preventing substance abuse: Main findings from the National Cross-Site Evaluation of high risk youth programs. In: Center for Substance Abuse Prevention. *Points of Prevention*. Vol., 1. Washington, DC: the Center.
- <sup>7</sup> Sculenber, J., Bachman, J.G., O'Malley, P.M., & Johnson, L.D. (1994). High school educational success and subsequent substance use: A panel analysis following adolescents into young adulthood. *J Health and Social Behavior*, 35(1), 45-62.  
Eggert, L.L. & Herting, J.R. (1993). Drug involvement among potential dropouts and "typical" youth. *J Drug Education*, 23(1), 31-55.  
Braggio, J.T. & Pishkin, V. (1993). Academic achievement in substance-abusing and conduct-disordered adolescents. *J Clinical Psychology* 49(2), 282-291.
- <sup>8</sup> Elias, M.J. et al. (1991). The promotion of social competence: A longitudinal study of a preventive school-based program. *American J Orthopsychiatry* 61(3), 409-417.
- <sup>9</sup> Washington Kids Count. (9/12/2000). Peer substance use affects middle school achievement. (press release)
- <sup>10</sup> Prothrow-Stith, D. & Quaday, S. (1996). *Hidden casualties: The relationship between violence and learning*. Washington, DC: National Consortium for African American Children & National Health Education Consortium.
- <sup>11</sup> Landen, W. (1992). Violence in our schools: What can we do? *Updating School Board Policies*, 23(1), 3-71.  
Lockwood, A.T. (1993). *Preventing youth violence in our schools*. Madison, Wisconsin: Wisconsin Center for Educational Research, 1-12.  
Obiakor, F.E. (1992, November). *At-risk youngsters: methods that work*. Presented at the annual conference of the Tennessee Association on Young Children, Nashville, Tenn.

- 
- <sup>12</sup> Lorian, R.S. & Saltzman, W. (1993). Children exposed to community violence: Following a path from concern to research action. *Psychiatry* 56(1), 55-65.
- <sup>13</sup> Bowen, N.K., & Bowen, G.L. (1999). Effects of crime and violence in neighborhoods and schools on the school behavior and performance of adolescents. *J Adolescent Research* 14(3), 219-341.
- <sup>14</sup> Nord, C.W. et al. (1992). Consequences of teen-age parenting. *J School Health* 62(7), 310-318.  
Caldas, S.J. 1994). Teen pregnancy. Why it remains a serious social, economic, and education problem in the US. *Phi Delta Kappan* 75(5), 402-405.
- <sup>15</sup> Symons, C.W. et al. (1997). See note 2.
- <sup>16</sup> Shephard, R.J. (1997). Curricular physical activity and academic performance. *Pediatric Exercise Science* 9:113-126. Shephard, R.J. et al. (1984). Required physical activity and academic grades: A controlled longitudinal study. In *Children and Sport*, ed. Ilmarinen & Valimaki. Berlin: Springer Verlag, 58-63.  
Sallis, J.F. et al. (1999). Effects of health-related physical education on academic achievement: Project SPARK. *Research Quarterly for Exercise & Sport* 70(2), 127-134.  
See also Nagya, R. (2000). Schooling, health knowledge and obesity. *Applied Economics* 32, 815-22.
- <sup>17</sup> Powell, C.A. et al. (1998). Nutrition and education: A randomized trial of the effects of breakfast in rural primary school children. *American J Clinical Nutrition* 68(4), 73-79.  
Murphy, J.M. et al. (1998). The relationship of school breakfast to psychosocial and academic functioning: Cross-sectional and longitudinal observations in an inner-city school sample. *Archives of Pediatrics & Adolescent Medicine* 152, 899-907.  
Myers, A.F. et al. (1989). School breakfast program and school performance. *American J Diseases of Children* 143(10), 1234-139. See also note 2.
- <sup>18</sup> Barnard, A. (2000, November 29). Study links school breakfast, results. *Boston Globe*.
- <sup>19</sup> Jennings, J., Pearson, G., & Harris, M. (2000). Implementing and maintaining school-based health services in a large, urban school district. *J School Health* 70(5), 201-205.  
Nabors, L.A. & Reynolds, M.W. (2000). Program evaluation activities: Outcomes related to treatment of adolescents receiving school-based mental health services. *Child Services* 3(3), 175-189.
- <sup>20</sup> Eggert, L.L. et al. (1994). Preventing adolescent drug abuse and high school dropout through an intensive school-based network development program. *American J Health Promotion* 8(3), 202-215.
- <sup>21</sup> Hawkins, J.D. et al. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics and Adolescent Medicine*, 153(3), 226-234.

## 2003 STUDENT SURVEY SCHOOL-RELATED INDICATORS

The following lists specific measures on the California Health Kids Survey (CHKS) that relate to assessing the school environment or climate and variables related to school achievement.

### Secondary School Instrument


| Question*   | School Variable  |
|---|--|
| <b><i>ATOD Use and Availability at School</i></b> |  |
| A36   | Drunk/high, ever   |
| A46-48  | Alcohol, tobacco, and marijuana use, past 30 days  |
| A69, C21-2  | Offered drugs at school, past 12 months; Perceived drug and alcohol availability                                 |
| C10-11  | Experienced AOD-related problems with school work or behavior  |
| C23-24  | School response to AOD use/possession  |
| <b><i>Victimization, Violence, and Safety</i></b> |  |
| A62   | Was pushed or shoved, past 12 months   |
| A65-67  | Experienced rumor or lie, sexual joke, or made fun of, past 12 months  |
| A75-80  | Harassed because of race/ethnicity, gender, religion, sexual orientation, or disability                          |
| A63   | Afraid of being beaten up  |
| A64   | Been in a physical fight, past 12 months   |
| A68-70  | Vandalism: Had property stolen/damaged; Damaged school property, 12 months                                       |
| A71-2, C34  | Carried gun or other weapon, past 12 months & 30 days  |
| A73   | Threatened/injured by weapon, past 12 months   |
| A74   | Saw a weapon, past 12 months   |
| A81   | Social disapproval of carrying weapon  |
| A82, C31  | Perceived safety   |
| <b><i>Achievement</i></b>                         |  |
| A86-87  | Grades received and classes skipped/cut last year  |
| <b><i>Positive School Community</i></b>           |  |
| B6-14   | Caring relationships, High expectations, and Opportunities for Meaningful Participation, and Total school assets |
| B1-5  | School connectedness scale   |
| <b><i>Physical Education</i></b>                  |  |
| E11-12  | Number of days of school PE per week & minutes of exercise per class   |

\*Item numbers refer to the CHKS high school modules.

**Elementary School Instrument**

| Question | School Variable  |
|----------|--|
|          | <b><i>Substance Use</i></b>  |
| 31       | Ever use alcohol or other drug before or at school   |
|          | <b><i>Victimization, Violence, and Safety</i></b>  |
| 17       | Hit or pushed other kids   |
| 19       | Was his or pushed  |
| 18       | Spread rumor or lies about other kids  |
| 20       | Experienced rumors or lies being spread about him/her  |
| 45       | Teased about way body looks  |
| 24       | Afraid of being beaten up  |
| 21       | Carried weapon   |
| 22       | Saw a weapon   |
| 24       | Perceived safety   |
|          | <b><i>Achievement</i></b>  |
| 12       | Grades received  |
| 16       | Plans to go to post-secondary school   |
| 41       | Achievement motivation (Do you try to do your best?)   |
|          | <b><i>School Assets</i></b>  |
| 9-15     | Caring relationships, High expectations, and Opportunities for Meaningful Participation, and Total school assets |

CALIFORNIA *healthy kids* SURVEY

 *See next page for Resilience and Youth Development Measures*



## Resilience / Youth Development Module

### External Assets — School

The CHKS provides a indicator of overall student connectedness or adjustment to school, a powerful motivator for academic achievement. It measures the three external assets in youth that have been associated with positive school, personal, social, and health outcomes: Caring Adult Relationships, High Expectations and Supports, and Meaningful Opportunities to Participate. These assets are also linked to low involvement in risk behaviors.

**Caring Adults:** At my school, there is a teacher or some other adult who: cares about me; notices when I'm not there; listens to me when I have something to say.

**High Expectations and Supports:** At school, there is a teacher or some other adult who: tells me when I do a good job; always wants me to do my best; believes that I will be a success.

**Meaningful Opportunities to Participate:** I do interesting activities at school; At school, I help decide things like class activities or rules; I do things at my school that make a difference.

### Internal (Individual) Asset Scales

The CHKS measures six internal assets that have also been linked to high school achievement and low involvement in those risk behaviors that serve as barriers to learning. These personal strengths are both the outcomes of and contributors to positive school climates.

**Cooperation and Communication.** Central to school success are the interrelated abilities to cooperate with others and communicate their desires in an assertive, as opposed to a passive or aggressive, manner. Standing up for oneself without putting others down is exactly what school bullies have yet to learn.

**Self Efficacy.** Perceived self-efficacy refers to the belief in one's own competence and capabilities to be successful in life. Self-efficacy is associated with many measures of school and life success, including academic motivation, achievement, and confidence. Perceived self-efficacy is also associated with feeling one has the power to make a difference.

**Empathy.** Understanding and caring about other students' experiences and feelings is critical to a healthy and safe school climate, a prerequisite for successful learning. Students that realize they share a human connection with others do not hurt other students through harassment, teasing, and other forms of violence.

**Problem Solving.** Students who learn to plan, to identify resources, to think critically and reflectively, and to resolve conflicts peacefully are the bricks and mortar of both academic achievement and a safe school environment.

**Self-Awareness.** This scale measures whether student have some understanding of who they are, why they do what they do, and their life purposes, which contributes to a sense of connectedness not only to school but to life itself.

**Goals and Aspirations.** Educational aspirations and achievement motivation, as measured in this scale, are consistently documented in the research as the personal strengths characterizing school success and healthy development. The critical challenge for schools is to keep tapping this wellspring of intrinsic motivation.