

# The State Data System to Assess Learning Barriers, Supports, and Engagement: Implications for School Reform Efforts

Gregory Austin and Bonnie Benard (gaustin@wested.org)

WestEd, 4665 Lampson Ave, Los Alamitos, CA 90720

Prepared for the EdSource California Education Policy Convening, Sacramento, October 19, 2007 (revised)

## Problem Statement

In assessing the current state of *Education Data in California*, Hansen (2007) concluded “that California is lagging most other states in developing education data systems capable of helping policymakers and others understand how schools are doing.” Absent is a “culture of data” emphasizing the connection between good data and school improvement efforts. Her review, however, did not take into consideration one area of education data in which the state is on the cutting edge. The California Department of Education (CDE) has created the nation’s most extensive, comprehensive system for providing local education agencies with data on school climate, student engagement, and nonacademic learning barriers and supports. This system is based on two complementary surveys — the *California Healthy Kids Survey* (CHKS) for students and the *California School Climate Survey* (CSCS) for school staff. LEAs are required to administer these two surveys simultaneously at least once every two years in compliance with Title IV provisions of the No Child Left Behind Act.<sup>1</sup> In this brief we describe the surveys, the value of the data for school improvement efforts, and the challenges that have been encountered. Efforts to reform schools and improve achievement often fall short because they fail to consider the school context in which instruction occurs and whether students are ready, able, and motivated to learn. By providing such critical data, the CHKS and CSCS help guide schools in creating school climates that support effective learning and teaching.

## Survey Framework

Underlying these two surveys is the recognition by CDE that learning is a complicated phenomenon, affected by a multiple related variables, and that local schools need data to determine:

- the nonacademic social, emotional, behavioral, and health-related barriers to learning and success that their students’ face; and
- whether their school climates impede or promote students’ motivation, readiness, and ability to learn, as well as their teachers’ ability to effectively teach.

The supports and services that students need to learn and stay in school tend to be viewed as outside the core academic activities and marginalized within schools (Adelman & Taylor 2005). Reflecting this fragmentation, most school reform plans focus almost exclusively on the educational factors that directly affect student academic achievement, such as curriculum and instruction, teacher content expertise, leadership, and governance and finance, as framed by the *Getting Down to Facts* report. While these are certainly the essential cornerstones of school reform, they are not sufficient in themselves. Too often reform efforts fall short because they fail to address the context in which the curriculum and instruction are implemented. Not all students may be ready or able to learn — to benefit from improvements in instruction — because: (1) they don’t feel emotionally or physically safe at school; (2) they don’t feel connected to school; (3) they don’t find school relevant or engaging; and/or (4) they are hungry, worried, depressed,

---

<sup>1</sup> The surveys were developed by WestEd under contract to CDE. WestEd provides technical assistance to schools in collecting, processing, reporting, and using the results. Information is available at the website [www.wested.org/chks](http://www.wested.org/chks).

## **Assessing Learning Barriers and Supports**

under the influence of alcohol or other drugs, or suffering from other nonacademic “barriers” that undermine the process of learning.

The fundamental challenge to school reform, the National Research Council (2003) observes, is to create a set of circumstances in which students take pleasure and meaning in learning and have the supports they need to be able to learn. It is estimated that 40-60% of high school students are chronically disengaged, with the percentages of low-income, minority, urban students being even higher. Growing numbers of children are coming to school with a variety of health-related problems that make successful learning difficult, if not impossible (Council of Chief State School Officers, 1998). How do schools engage, motivate, and support students so that they can achieve? Ensuring that students are safe, healthy, and resilient is central. It is, of course, not the role of the schools alone to solve all student problems, but neither can they neglect them when they interfere with their students’ ability to learn, the collective learning environment, and teachers’ ability to teach. Research studies and reviews over the past decade have consistently concluded that student health and developmental status are inextricably intertwined with achievement (CDE 2004). They 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 belonging, security, respect, identity, power, mastery, and meaning — are not being met. As the National Research Council (2003:17) emphasized, “Although learning involves cognitive processes...motivation to learn depends on a student’s involvement in a web of social relationships...It is not coincidental that many of the qualities associated with engaging schools also have been found to foster healthy youth development.”

It is precisely in the schools that are experiencing the greatest academic challenges — such as those in marginalized, high-poverty communities — that the needs for learning supports are the greatest. Many urban schools are plagued by “nested inequalities.” Failure to systematically address the barriers to learning and engagement that their students experience may be one reason why school reform efforts have not improved outcomes for urban high school students on a large scale. A growing body of research shows that turning around low-performing, high-poverty schools requires a comprehensive, systemic approach to fostering a learning culture and climate that is rooted not only in effective pedagogy and governance but also in providing a safe, caring, supportive, and engaging environment for both students and teachers.

### **Survey Content**

The *California Health Kids Survey* (CHKS) and *California School Climate Survey* (CSCS) are designed to provide the data that schools need to undertake such an integrated, effective approach to school improvement. Developed in 1998 and required since fall 2003, the CHKS is the largest, most comprehensive effort in the nation to assess *local* students and schools on a regular basis to provide key data on youth learning barriers, engagement, and supports. A prime focus is *health-risk behaviors*, especially those linked to school *safety*, physical and psychological. It provides school-based data on perceived safety, violence- and crime-related behaviors, and the level of harassment and victimization that students’ experience. The second health focus is *substance abuse*, especially use on campus, which high school staff have indicated on the CSCS is the major problem school’s face after truancy.

To assess *school engagement*, the CHKS provides student self-report data on usual classroom grades received, truancy, and school connectedness. The school connectedness scale, derived from the National Survey of Adolescent Health, is reliable ( $\alpha = 0.84$ ) and composed of five items that measure the degree to which students feel close to people at school, a part of the school, treated fairly, happy, and safe at school. This measure is highly correlated with school attendance and grades and with low health-risk involvement (Resnick et al., 1997).

## **Assessing Learning Barriers and Supports**

The CHKS also measures student perceptions of the presence in school of three developmental *supports* or protective factors that research has consistently linked to resilience in the face of adversity and to positive academic, social, personal, and health outcomes: *caring adult relationships*, *high expectations*, and *opportunities to participate in meaningful activities* (Benard 2004).<sup>2</sup> These three supports align with the characteristics of effective schools (e.g., National Research Council 2003) and lie at the heart of a comprehensive, systemic approach that addresses both the pedagogic *and* social, emotional, and behavioral barriers to learning and engagement.

- **Caring relationships** between students and staff have been shown to be one of the most powerful influences on school connectedness, learning motivation and performance, and involvement in risk behaviors. Reflecting this, one of the four main charges of CDE’s P-16 Council is to ensure that all students have access to *caring* and qualified teachers. The CHKS measures student perceptions that there is a teacher or other adult in the school that really cares about them, notices when they are not there, and listens to them.
- **High expectation messages** have been consistently linked to academic success, and are a key component of school reform initiatives, one of the four principal educational needs identified by the P-16 Council. Too often this concept is operationalized solely as “pressure to succeed” on tests in ways that are counterproductive to learning. Based on evidence that high expectations must be accompanied by teachers’ encouragement and commitment to student progress, the CHKS asks students whether there is a teacher or some other adult at school “who tells me when I do a good job”; “who always wants me to do my best”; and “who believes that I will be a success.” The survey thus delineates the nature of effective expectation messages as well as their prevalence.
- **Meaningful participation** refers to the involvement of students in activities that are relevant, engaging, interesting, and/or provide opportunities for responsibility and contribution. The CHKS scale asks students whether they have a chance in school to help decide things like class activities or rules and do things that are interesting and that “make a difference.” Giving youth these opportunities helps to promote a sense of autonomy and to engage their intrinsic motivation to learn.

Establishing these conditions not only will positively impact learning directly but also indirectly to the extent that meeting the developmental needs of youth and fostering school connectedness are associated with lower levels of health-risk behaviors, which facilitates learning.

A series of school-level analyses of the relationships between CHKS indicators, school demographic characteristics, and STAR test-score results have begun to demonstrate how these school-climate factors and health-related behaviors are related to academic performance in California schools — corroborating the merit of learning supports to school improvement efforts:

- Schools with large percentages of students who engaged in risky behavior, were exposed to health risks, or had low school supports had lower API scores than other schools. Skipping breakfast, substance use, drug availability at school, and lack of school safety had strong relationships to lower performance (Hanson & Austin 2002).
- Schools made greater progress in raising test scores over a year when their students were less likely to engage in substance use and violence, and were more likely to eat nutritiously, exercise, and report caring relationships and high expectations at school (Hanson, Austin, & Lee-Bayha 2004); and

---

<sup>2</sup> These assets are also measured in the community, peer, and home environments, but the latter two are not required to be administered. The elementary CHKS has fewer and shorter versions of these scales.

## **Assessing Learning Barriers and Supports**

- Although school poverty was strongly linked to both academic performance and school-related well-being, this link could not entirely explain why students in low-performing schools consistently reported lower levels of school supports, safety, and connectedness than students in high-performing schools (Hanson et al. 2007).

The *California School Climate Survey* (CSCS) was developed and implemented in fall 2004 to fulfill the NCLB Title IV mandate to conduct an anonymous teacher survey of the incidence, prevalence, and attitudes related to drug use and violence. CDE also recognized that this was an opportunity to collect other data to guide school improvement efforts. To this end, the CSCS consists of 48 questions which factor into scales that measure the level to which staff perceive their school to have: (1) a *positive, safe learning environment*; (2) *norms and standards* that encourage academic success; (3) positive intra-staff and staff-student *relationships*; and (4) students *behaviors that facilitate learning*, including being ready and motivated to learn. It also asks staff to report on the degree to which 13 student behaviors pose a problem to the school.

In addition, a second part of the CSCS consists of 21 items assessing the presence of student programs, supports, and services answered only by practitioners who provide services or instruction related to health, prevention, discipline, safety, or counseling. The results can be compared to the level of need as indicated by staff perceptions and student self-report.

Together, these two surveys provide a wealth of information about the learning climate at a school. They assess variables that align with the three main educational conditions that the National Research Council (2003) posits promote intellectual engagement: belief in competence and control, the values and goals of education, and belonging to the school. The CSCS provides an unprecedented opportunity to understand the learning climate and challenges of California schools as perceived by staff, and the factors associated with variations in these perceptions. These results can then be compared to the student behaviors and attitudes measured by the CHKS. Using their CHKS datasets, schools can analyze how student attendance, performance, connectedness, supports, and risk behaviors are interrelated and vary among groups of students.

In addition, both surveys can be customized. Schools can add questions of their own choosing to meet other local data needs. In this sense, the CHKS and CSCS are not just surveys but data systems that can be used to collect any information needed to guide school improvement.

### **Survey Administration and Data Availability**

The CHKS is conducted biennially among students in grades 5, 7, 9, 11, and in continuation and community day schools. Survey participation requires parental consent and is voluntary on the part of students. The data are processed by WestEd, the survey contractor, and each school district automatically receives a report summarizing the results and discussing the significance of the questions, as well as a *Key Findings* suitable for public dissemination. Aggregated, weighted county-level reports are also now produced. All reports are posted on the CHKS website, where they may be publicly downloaded ([www.wested.org/chks](http://www.wested.org/chks)).

Only a few (all small) districts are exempt from administering the survey because they do not accept Title IV funds, and it is administered to every school and student in 85% of the state's districts. In the 30 largest districts in California — representing 29% of state enrollment — the CHKS is administered only in a sample of schools. The entire dataset is available for analysis under a Memorandum of Understanding to preserve the confidentiality of the results. As of spring 2007, the CHKS dataset consists of 2,700,000 records since 2000. Since fall 2003, approximately 900,000 student records have been added every two years from about 850-900 districts (depending on years covered) and almost 7,000 schools.

## ***Assessing Learning Barriers and Supports***

Since fall 2004, the CSCS has been administered online to administrators and all certificated staff (grades 5 and above, on a voluntary basis) in the same schools and at the same time as the CHKS. Results are received automatically online as soon as the survey is completed. In the first two-year period of its availability (2004-2006), the CSCS was completed in 4,136 schools, by 67,901 staff, in 535 districts. Plans are now being made for posting results on the website.

### **Creating a Culture of Data: Progress and Challenges**

The CHKS and CSCS are helping to build the “culture of data” that California needs (Hansen 2007). All data are easily available to the public and researchers. Districts receive reports that highlight the significance of the questions and guidelines for using and disseminating the data. Since the CHKS began in 1999, much progress has been achieved, notably in the growing recognition of its value and in its fostering of school-community collaboration.

**Growth in Local Data Appreciation.** Providing data for the first time about local students has raised school officials’ awareness of the problems and learning barriers that their students faced, and the need to address them, replacing initial beliefs that “our students” don’t have these problems. Initial fears about the potential adverse effect of the data on attitudes toward the schools have dissipated. Public web-site posting of the results has now occurred without an issue. Reflecting this, districts and schools are also increasingly requesting school-specific data reports to guide programs and policies, in addition to the district-level data that they automatically receive. In 2005/06 approximately half of districts requested 1,900 school-level reports. Moreover, growth in the recognition of the value of the data for county-wide planning led to the spread of county coordination of data collection and the request to CDE to produce county-level reports, which are now posted on the website.

**School-Community Collaboration.** Schools alone can’t address all the nonacademic barriers to learning that students face. Yet achieving the school-community collaboration that is needed has long seemed to be a barrier in itself. By providing local data, the CHKS has helped promote such collaboration at the local and county levels, a testimony to the power of data to affect change. Several county health departments are now providing support to their districts CHKS data collection and even adding items to the survey in order to work collaboratively with the schools in addressing these needs on a countywide basis.

But more remains to be done to further harness the value of the surveys, and ensure that the time, effort, and expense involved in conducting them bears fruit. The following are some of the challenges that survey still faces.

- **Data Use Capacity Building.** Districts need support in building their capacity to fully understand how to interpret, analyze, and use CHKS/CSCS data, especially in making the link to program needs. There is need for a systematic assessment of how districts have applied their data and the barriers encountered in making data-driven decisions.
- **Data Marginalization.** Reflecting the general marginalization of learning supports in schools, use of the surveys results is still largely limited to staff responsible for student health, risk-behavior prevention programs, and counseling.
- **Dataset Analysis.** A final “limitation” of the system is that the aggregated datasets are under utilized. This is due, in part, to the lack of funding for analysis, although it also arguably reflects the marginalization of interest in learning supports. The dataset provides an unprecedented means to analyze, across the state’s schools, how school climate and nonacademic factors are related to achievement, as demonstrated by the

## **Assessing Learning Barriers and Supports**

studies discussed above. There are two other areas to note in which the dataset is particularly useful because of its large size (c. 450,000 records added per year). The first is analysis of variations across ethnic/racial groups, such as factors influencing the achievement gap, especially among subgroups usually underrepresented in surveys (the CHKS asks about 13 Asian and 8 Hispanic subgroups). The second lies in understanding the state's little-studied alternative education system and its students. It includes data from 70% of continuation schools, representing 82% of enrollment, and approximately 40% of community day schools, representing 60% of enrollment.

- **The Exception of Large Districts.** The survey results are of less value to the 15% of large districts that are required to survey only a representative sample of students (c. 900), possibly in only ten schools per grade.
- **Data Collection.** Schools have made tremendous progress in learning how to properly administer the CHKS, but they continue to need human and financial help, which often comes from county health and education offices. Because it is so new, the CSCS remains plagued by low staff participation in many schools. As recognition of the value of CSCS data spreads, participation rates can be expected to increase.

### **Conclusion and Recommendations**

As schools, agencies, and the public search for strategies to improve low-performing schools, retain more students in school, and ensure that all students learn and succeed, the CHKS and CSCS provide important but still largely overlooked data resources for finding solutions. Unfortunately data fragmentation has mirrored policy fragmentation. It is time to ask a critical question: Have efforts to boost academic performance in California been hampered because the impact of nonacademic barriers to learning and engagement has been overlooked? The great value of the CHKS and CSCS lies precisely in identifying those barriers that must be taken into consideration along with effective pedagogy. In this regard, more analysis of the dataset is needed. In addition, to ensure that the surveys fulfill their potential, districts need more assistance in collecting, customizing, and using their data, and research is needed to understand and address the problems they experience in the process.

### **References**

- Adelman, H, and Taylor, L. (2005). *School improvement and planning: What's missing*. Los Angeles, CA: UCLA Center for Mental Health in Schools
- Benard, B. (2004). *Resiliency: What have we learned?* San Francisco: WestEd.
- California Department of Education. (2004). *Getting results, 5: Student health, supportive schools, and academic success*. Sacramento, CA: the Department.
- Council of Chief State School Officers. (1998). *Incorporating health-related indicators in education accountability systems*. Washington, DC: The Council.
- Hansen, J.S. (2007). *Education data in California: Availability and transparency*. Paper prepared for the Getting Down to Facts Project. ([irepp.stanford.edu/projects/cafinance-studies.htm](http://irepp.stanford.edu/projects/cafinance-studies.htm))
- Hanson, T.L. and Austin, G.A. (2002). *Health risks, resilience, and the Academic Performance Index*. (California Healthy Kids Survey Factsheet 1). Los Alamitos, CA: WestEd. ([www.wested.org/cs/chks/print/docs/chks\\_factsheets.html](http://www.wested.org/cs/chks/print/docs/chks_factsheets.html))
- Hanson, T. L., Austin, G. A., & Lee-Bayha, J. (2004). *Ensuring that No Child is Left Behind: How are Student Health Risks & Resilience Related to the Academic Progress of Schools*. San Francisco: WestEd. ([www.wested.org/cs/chks/print/docs/chks\\_health.html](http://www.wested.org/cs/chks/print/docs/chks_health.html))
- Hanson, T., Bono, G., Zheng, C., and Austin, G. (2007). *Academic performance and school-related well-being in California schools*. San Francisco: WestEd/Regional Educational Laboratory—West.
- National Research Council. (2003). *Engaging schools*. Washington DC: National Academies Press.
- Resnick, M., et al. (1997). Protecting adolescents from harm: Findings from the National Longitudinal Study on Adolescent Health. *Journal of the American Medical Association*, 278, 823–832.