Positive School Climate: A Hallmark of Academically Successful Schools

Some schools perform much better than others academically. Understanding why holds a key for school improvement. To better understand the factors associated with school academic success, an innovative analysis was conducted that demonstrated that a positive school climate is a distinguishing characteristic of California secondary schools that "beat the odds" and performed better than predicted on the state's standardized achievement tests. These beating-the-odds schools not only had significantly more positive school climates than consistently underperforming schools but also all other schools that performed about as would be predicted. The more positive the school climate, the greater the probability of beating the odds. Moreover, school climate was more strongly associated with beating the odds than a school's level of personnel resources. These findings applied to both low and high income schools.

In this factsheet, schools that beat the odds are referred to as BTO schools. For at least three consecutive years, these schools had standardized test scores better than would be predicted, based on the socioeconomic characteristics of the school's student body. Consistently underperforming schools are referred to as CU schools. These schools had test scores lower than would be predicted based on the same socioeconomic characteristics for three straight years.

METHODOLOGY AND DATA SOURCES

School success is often defined in absolute terms, such as average standardized test scores. Such criteria are known to be strongly correlated with the socioeconomic characteristics of a school's student body. To address this limitation, a successful school was defined as one that beat the odds by recording standardized test scores *better than would be predicted based on its student socioeconomic characteristics* for at least three consecutive years.[1] Using this method, out of a sample of 1,715 middle and high schools in California, we identified three groups: 40 BTO schools (2.4% of the sample); 20 CU schools (1.2% of the sample); and the remaining schools that performed more or less as predicted.

To analyze how school climate differed across these three groups, we used the School Climate Index (SCI) developed for the California Department of Education's *Safe and Supportive Schools* (Cal-S3) project.[2] The SCI is based largely on student self-report data from the California Healthy Kids Survey (CHKS) measuring dimensions of school climate such as safety, bullying, and harassment; school connectedness, adult expectations, staff-student relationships, and opportunities for mean-

1 Academic performance indicators were accessed through the California Standardized Testing and Reporting (STAR) program. The academic outcomes of interest were middle school English language arts (ELA) and math scores on the California Standard Tests (CST) from 2007-08 to 2010-11 and high school ELA CST scores and math scores in grade 10 on the California High School Exit Exam (CAHSEE) from 2008-09 to 2010-11. Student demographic data for each student came from the California Basic Education Database System (CBEDS).

2 California is one of eleven states that received federal Safe and Supportive Schools grants to improve the learning conditions and other school climate factors in low-performing, needy high schools. The project is administered by the California Department of Education, Coordinated School Health and Safety Office. For more information and access a wide range of resources to assist in school climate improvement, visit the project website: http://californiaS3.wested.org.

ingful student participation. It also includes truancy data from the California Basic Education Database System (CBEDS). The SCI ranges from 100 to 500; the higher the score, the more positive the climate.[3]

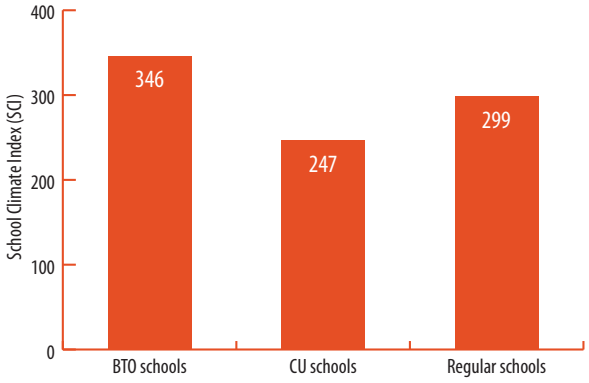
Data on school personnel resources were obtained from CBEDS. A single personnel–resources index was created that gives each school a standardized score based on their averages across six indicators—teacher education, experience, tenure, and credentials; administrator experience; and the number of student services providers as a ratio of total staff. These factors were included in the analysis to examine the connection between climate and academic success *even between schools with the same level of personnel resources.*

SUCCESSFUL SCHOOLS HAVE SIGNIFICANTLY MORE POSITIVE SCHOOL CLIMATES THAN OTHER SCHOOLS

SCHOOL CLIMATE. Overall, BTO schools had more positive school climates compared to both CU schools and other public secondary schools in California performing more or less as predicted. As shown in Figure 1, BTO schools had SCIs averaging almost 350, compared to 250 for CU and 300 for other performing–as–predicted schools. On average, BTO schools had climate scores at the 82nd percentile, while CU schools' scores were at the 14th percentile, and other schools were at the 49th percentile. Even after adjusting for schools' student characteristics and personnel resources, these differences remained significant.

3 For information on the development and use of the School Climate Index, see Hanson, T. (2012). *Construction of California's School Climate Index (SCI) for high schools participating in the Safe and Supportive Schools Program.* San Francisco: WestEd. Download at: http://californias3.wested.org/about. The SCI is included in Cal–S3 School Climate Report Cards, which can be downloaded from the same webpage. Districts that administer the CHKS at the school level may request preparation of School Climate Report Cards by calling the survey help line: 888.841.7536.

Figure 1. School Climate in Beating–the–Odds, Consistently Underperforming, and Regular Schools



STUDENT DEMOGRAPHICS. There is little question that student demographics are linked to academic success. Because student demographics were taken into account when identifying BTO schools, the 40 BTO schools were similar to other schools in terms of student race, income level, and EL status. BTO schools did have slightly lower poverty rates, as indicated by the percentage of students eligible for the free– and reduced–price lunch program. Still, the 40 BTO schools span the poverty spectrum—some had very few low–income students; some had almost all low–income students.

PERSONNEL RESOURCES. On average, BTO schools had higher levels of personnel resources than CU schools and similar levels of resources compared with other schools.

A POSITIVE SCHOOL CLIMATE IS LINKED TO A GREATER LIKELIHOOD OF BEATING THE ODDS

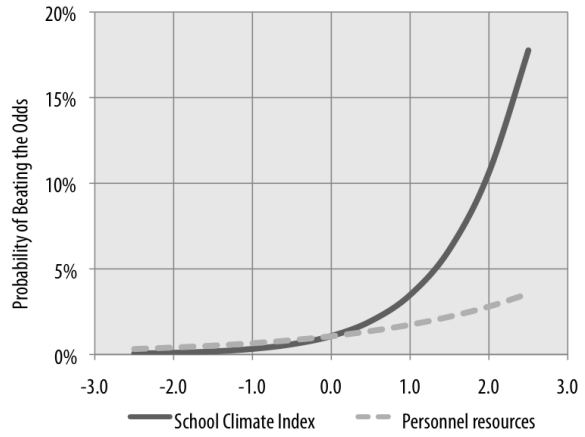
A school's SCI had a stronger association with the *likelihood* of beating the odds than did its personnel resources and student demographics. As shown in Figure 2, an average secondary school's probability of beating the odds increases as both SCI and personnel resources increase, but the increase in probability is much higher for school climate.

Prepared by WestEd for the California Department of Education, under contract for the Safe and Supportive Schools Initiative.

- A SCI of 350 is associated with a 3.5% probability of beating the odds.
- A SCI of 400 (the top five percent) is associated with a 10.6% probability of beating the odds, or ten times higher than for an average school.
- A SCI of 425, is associated with a 17.8% probability of beating the odds.
- Moreover, a school that has a SCI of 480—equal to the highest SCI value in the sample—has a 44.5% estimated probability of beating the odds (not shown in figure).

In contrast, even in a school with the optimal level of personnel resources, the BTO probability was only 3.9%.

Figure 2. A School's Probability of Beating the Odds Based on its School Climate Index and Personnel Resources



For student demographics, the association with the probability of beating the odds is not significantly different from that of school climate. Enrollment appears to be the main driver of the association between student demographics and beating the odds, with smaller student bodies predicting a greater likelihood of beating the odds.

PRACTICAL IMPLICATIONS

This analysis shows that school climate is an important factor in school success. A more positive school climate is a defining characteristic of schools that consistently beat the odds and performed better than their peers. In contrast, consistently underperforming schools had poorer school climates than all other schools.

School climate may be part of the solution to helping schools be successful academically. Indeed, these results suggest that school climate has more to do with beating the achievement odds than personnel resources.

The social forces that put students of certain backgrounds at a disadvantage are not within a school's or district's ability to address alone. The results of this analysis control for students' background and direct our attention toward characteristics of schools that are malleable, toward measures that educators can take to meet students where they are and improve their learning. School climate conditions can be targeted through intervention and changed. Indeed, for low–SES schools, improving school climate may be part of the solution to helping schools beat the odds precisely because it helps reduce the adverse effects of poverty and associated non–school–related risk factors.[4] In addition, given that the BTO group included both high– and low–SES schools, the results suggest that school climate improvement may help schools improve their test scores regardless of their students' SES levels.

GETTING STARTED IMPROVING SCHOOL CLIMATE

The first step in starting to improve a school's climate is to assess it and use the data to create an environment that is safe and supportive, fosters positive relationships, is challenging and participatory, and engages students in learning. Schools in California have access to the California School Climate, Health, and Learning Surveys (Cal–SCHLS) and can obtain SCI scores such as those used in this analysis. As part of Cal–S3, a School Climate Action Planning process has been developed to identify areas of need and guide efforts to improve them, including holding a Student Listening Circle to incorporate stu-

4 For more information on the school climate conditions measured by the CHKS and how they relate to school improvement, see: Austin, G., O'Malley, M., & Izu, J. (2011). *Making sense of school climate.* San Francisco: WestEd. Available for download at http://californiaS3.wested.org/tools.

dent voice into the process. The Cal–S3 website (www.californiaS3.wested.org) contains a wealth of resources and tools to assist in these efforts. *What Works Briefs* lay out key strategies and practices in each of the domains measured by the SCI. They include "quick win" strategies that are easy and inexpensive to implement and that have been shown to make a difference in the likelihood of success in school turnaround efforts. They also include more resource–intensive interventions, including those that have been validated through research and evaluation. For more information, call the Cal–SCHLS Helpline: 888.841.7536.

Suggested citation: Austin, G., Voight, A, & Hanson, T. (2013). *Positive school climate: A hallmark of academically successful schools.* S3 Factsheet #6. Los Alamitos: WestEd. Download from www.wested.org/resources

This factsheet summarizes the results of: Voight, Adam; Austin, Greg; & Hanson, Thomas (2012), *A climate for academic success: How school climate distinguishes schools that are beating the odds academically* (San Francisco: WestEd). This work was supported by the California Comprehensive Center at WestEd through funding from the U.S. Department of Education, PR/Award Number S283B050032. It does not necessarily reflect the views or policies of the U.S. Department of Education and you should not assume endorsement by the Federal Government. The full report may be downloaded at: www.wested.org/schoolclimatereportsummary