

The Achievement Gap, School Well-Being, and Learning Supports¹

One of the California Department of Education's (CDE) top priorities is addressing the vexing academic "achievement gap" between African American and Latino students and their White and Asian counterparts. Closing this gap is especially important to California because the state serves such high proportions of non-White students, as well as students whose native language is not English and who traditionally do not perform as well as other students in school. Poverty has been shown to be a major contributing factor to the racial/ethnic achievement gap. Yet a recent analysis of California's 2007 Standardized Testing and Reporting (STAR) data shows that poverty does not completely explain why the performance of African American and Latino students lags behind. "These are not just economic achievement gaps. They are racial achievement gaps," said Jack O'Connell, State Superintendent of Public Instruction.²

What other factors may account for this gap? This factsheet summarizes an analysis of how academic performance, socioeconomic status (SES), and "school well-being" vary in relation to the racial/ethnic compositions of California schools.³ School well-being refers to a school having a developmentally positive learning climate characterized by environmental supports, safety, and school attachment, as measured by student-reported data collected in 2004-06 by the *California Healthy Kids Survey* (CHKS).⁴

Overall, both academic performance and school well-being varied consistently and persistently across schools by racial/ethnic groupings. They were lowest in schools with large proportions of African American and Hispanic students, as well as in low-income schools, which have high enrollments of both groups. Controlling for SES and other school demographic characteristics reduced these racial/ethnic group differences but they still remained between these schools and those serving predominantly White students. This suggests that school-climate factors related to student well-being may also play a role in the gap and that one strategy to close it is to enhance learning supports that foster caring adult relationships, high expectations, meaningful participation, safety, and connectedness in schools serving large proportions of low-income African American and Hispanic students.

Sample and Outcome Measures

The study sample consisted of 4,489 public elementary schools, 620 K-8 schools, 1,165 middle schools, and 974 high schools. In addition to the CHKS, three other CDE data sources were analyzed for the two-year period 2004-06: Standardized Testing and Reporting Program (STAR) data, the Academic Performance Index (API) research files, and California Basic Educational Data System (CBEDS) data for school demographic characteristics. The measures used in the analyses were defined as follows.

Academic Performance and Race/Ethnicity. School-level academic performance was assessed by 2006 California Standards Test (CST) scores in English language arts and mathematics from the STAR data. Race/ethnicity was determined by using latent profile analyses to construct a typology indicating that schools in California fell into four groups: high Hispanic (40-45% of schools, depending on school level), high non-Hispanic White (41-47%), high African American⁵ and Hispanic (7-9%), and high Asian (5-7%). In this

¹ Suggested citation: Austin, G., Hanson, T., Bono, G., & Cheng, Z. (2007.) *The Achievement gap, school well-being, and learning supports*. CHKS Factsheet #8. Los Alamitos, CA: WestEd.

² California Department of Education, News Release, August 25, 2007, *State Superintendent Jack O'Connell releases 2007 STAR results showing encouraging, troubling trends*. <http://www.cde.ca.gov/nr/ne/yr07/yr07rel98.asp>

³ This factsheet is based on analyses currently being performed by WestEd staff. For further information, contact Dr. Thomas Hanson (thanson@wested.org).

⁴ For information on the development, purpose, and content of the CHKS, see www.wested.org/chks.

⁵ Only about 1.5% of schools in the state have African American enrollments that are greater than 50 percent of total enrollment.

factsheet, references to schools as being African American/Hispanic, Hispanic, White, or Asian indicate that the schools' enrollment consisted of *predominantly* that ethnic group(s).

Socioeconomic Status (SES). The SES of schools was measured by the proportion of students who participate in the free/reduced-price meal program, obtained from the API dataset. This was used to categorize schools into quintiles based on data for all schools in the state.

School Well-Being. To assess school well-being, the analysis used CHKS measures in three areas: environmental supports, attachment, and safety.

- *School Environmental Supports.* Two scales assessed student perceptions of three developmental supports (also called assets) in the school environment that research has consistently linked to resilience (i.e., success in the face of adversity or risk) and positive academic, social, and behavioral outcomes.⁶ A six-item scale measured positive interpersonal supports in two areas: *caring relationships* with adults and exposure to *high expectation messages*. A second scale measured *opportunities for meaningful participation* at school characterized by relevant, contributory, and interesting activities and involvement in decision-making. CHKS analyses have shown that the higher the level of these three environmental supports for students at school the more likely they are to exhibit school connectedness and higher test scores and the less likely they are to report health-risk behaviors (e.g., violence, substance use) that are barriers to learning.⁷
- *School Attachment.* Two measures assessed school attachment: (1) a five-item school *connectedness* scale assesses the degree to which students feel close to people at school, a part of the school, treated fairly, happy, and safe at school; and (2) a single-item measure of student-reported *truancy* in the past 12 months. The school connectedness scale has been shown to be consistently and strongly related to both low health-risk behavior and high academic achievement.⁸
- *School Safety.* The analysis examined three different aspects of school safety: the degree to which students *experienced harassment* (including hate-crime related) or violence victimization, they *engaged in bullying others and violence-related behaviors* (and for secondary students only, delinquency), and *perceived that their school was safe*.

To determine the extent to which school characteristics may account for the observed outcomes, some of the analyses were adjusted to include school-level controls, as appropriate. These controls included SES (percentage of students eligible for free/reduced price meals and average parental education), student race/ethnicity, gender, enrollment, urban/rural status, percentages of English language learner students, as well as year of survey administration.

Results

School Well-Being and Academic Performance. Schools were grouped into performance categories based on their 2004-05 Academic Performance Index (API), a school-level, weighted summary measure based on the national percentile ranking of student scores on subject-specific scores on California standards-based tests and other indicators. Students in low-performing schools consistently reported lower levels of school environmental supports, safety, and attachment than students in high-performing schools. School SES and other characteristics only partly accounted for these school-level relationships between academic performance and school well-being.

⁶ Benard, B. (2004). *Resiliency: What have we learned?* San Francisco: WestEd.

⁷ Hanson, T., Austin, G., & Lee-Bay, J. (2004). *Ensuring no child is left behind*. San Francisco: WestEd. See also CHKS Factsheets 1 and 3.

⁸ 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.

Racial/Ethnic Differences in Academic Performance. Academic performance measures were significantly and consistently different across schools with different racial/ethnic compositions. Schools serving high proportions of Hispanic and of both African American *and* Hispanic students had lower standardized test scores than schools serving high proportions of White and of Asian students.

SES did account for part of the racial/ethnic achievement gap. If schools in these different racial/ethnic composition groups served similar proportions of low-income students and were equal in terms of other school characteristics, the differences between predominantly Hispanic and predominantly non-Hispanic White schools were largely diminished. However, SES and other school characteristics did not explain all of these racial/ethnic-group variations in academic performance.

- Differences between predominantly Hispanic and predominantly non-Hispanic White schools still existed, if largely attenuated.
- Schools serving large numbers of African American *and* Hispanic students continued to exhibit substantial disadvantages.

For example, only 31% and 32% of 9th graders in Hispanic and African American/Hispanic schools, respectively, scored at proficient levels for English language arts, compared to 58% and 59% of students in White and Asian schools. After accounting for differences in free/reduced-price lunch, parental education, school enrollment, region, and population area characteristics, the scores of students in Hispanic schools were more similar to their counterparts in White schools but still lower (42% versus 49%), and African American/Hispanic schools were still much lower (37%). Asian schools scored the highest at 55%. In other words, other factors besides SES account for variations in performance by racial/ethnic groups.

Racial/Ethnic Differences in School Well-Being. Similarly, although to a much lesser degree, school well-being measures were substantially different across schools with different racial/ethnic composition. They were consistently lower among Hispanic and African American/Hispanic schools than High White and High Asian schools. Among 9th graders, students in African American/Hispanic and Hispanic schools were less likely than students in White schools to report feeling safe or very safe, to feel connected to the school, to report supportive relationships with adults at school, and to experience opportunities for meaningful participation. Consistent with their lower perceived safety, students in African American/Hispanic schools and Hispanic schools were more likely than students in White schools to report both school violence and victimization. In other words, students attending high schools serving high proportions of Hispanics and/or African Americans were less likely than students in White schools, to perceive that their schools provide the conditions, relationships, and supports that are associated with positive educational outcomes, and, arguably as a result, to feel as connected to their schools.

Are these differences brought about because schools serving high proportions of Hispanic and/or African American students are also more likely to be in low-income communities? As was the case with the variations in performance across racial/ethnic groups, controlling for SES and other school characteristics did substantially reduce racial/ethnic differences in school related well-being — but not all of them. After controlling for SES and other school characteristics, African American/Hispanic schools still had the lowest rates of school support and school safety, and the highest rates of both harassment/victimization and violence involvement. They also had the lowest school connectedness and highest truancy. Next in line were Hispanic schools, with Whites and then Asians tending to follow in that order, but with attenuated differences. For example, after adjustments, only 37% of 9th graders in African American/Hispanic schools reported being safe or very safe in school, compared to 49% of 9th graders in White schools.

Differences Between Low and High-Income Schools. When schools were grouped into quintiles based on SES, students in low-income schools, the majority of whom are Hispanic and African American, exhibited

substantially lower academic performance than their counterparts in other schools.⁹ Students in schools serving the most low-income students also reported relatively low levels of school support and meaningful participation, school safety, school connectedness, and the highest rates of truancy, although the differences were not as large as for academic performance. Socioeconomic status was also related to violence and victimization at school.

For example, in high schools serving the highest proportions of students in the free/reduced-price meals program (5th quintile), only about one-fourth of 9th graders scored at the proficient level in English language arts. This compares to 70% of 9th graders in the most affluent middle schools (1st quintile). Although low-income schools also are high-minority, the different racial/ethnic composition of low-income schools did not substantially account for SES-related differences in academic performance and school well-being, substantiating the persistence of the SES-achievement gap.

Summary and Discussion

There are no definitive answers to what factors are most responsible for this achievement gap, nor to what actions will result in the largest improvements. What is evident is that the problem has deep, intertwined roots in conditions in and out of school, with poverty the most frequently identified.¹⁰ Controlling for SES and other school characteristics in these CHKS analyses did substantially reduce racial/ethnic-group differences in STAR test scores. Academic performance was also lowest in low-income schools, which serve high proportions of African American and Hispanic students, even after controlling for racial/ethnic composition. SES plays an important role in the achievement gap, underscoring the need for schools, families, communities, and government agencies to work in concert to address the consequences of poverty in America.

However, as with the CDE analysis of STAR data at the individual student level, this study at the school level revealed that SES and other demographic factors do not explain *all* of the differences in performance outcomes across the racial/ethnic school groups. Even after adjusting for SES and other school factors, performance remained lower in schools serving high proportions of Hispanic and African American students. One factor that may explain part of the remaining racial/ethnic achievement gap is school well-being, as measured by school environmental supports, safety, and attachment. Each of these measures was associated with higher school performance as measured by the API. They also varied across racial/ethnic groups in similar ways to academic performance. Controlling for SES and other school characteristics did substantially diminish these group differences, but not all of them.

These analyses do *not* shed light on the causal relationships between school well-being and academic performance. They do describe how academic performance and school well-being *similarly* vary based on school racial/ethnic and SES composition. They affirm that students in schools with high proportions of African Americans and Hispanics face a “double jeopardy” of educational disadvantages both in terms of poverty and of having more negative school environments that are less conducive to learning because they are less safe; are lacking in supportive caring relationships between teachers and students, high expectation messages, and meaningful participation; and, undoubtedly as a result, less engaging. There is a larger unmet need for such learning supports in schools with high proportions of African American and Hispanic students than of Whites and Asians, as well as in low-income and low-performing schools. That the race/ethnicity gap in school well-being remained in this analysis even after controlling for SES and other school demographic characteristics indicates that providing safer, more caring, more academically supportive, and more engaging school environments for African American and Hispanic students should be part of a comprehensive approach to closing the academic achievement gap.

⁹ An average of 73% of students in the lowest SES schools (bottom quintile) were Hispanic and 10% were African American, compared to 15% and 4% in the highest SES schools (top quintile).

¹⁰ Barton, P. E. (2001). *Facing the hard facts in education reform*. Princeton, NJ: Educational Testing Service.