



# The Bell Policy Center

# Policy Brief

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## Understanding and Closing Colorado's Achievement Gap

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*Asian American and white students consistently outperform American Indian, black and Hispanic students on standardized tests.*

*Students from middle- to high income families outperform students from low-income families.*

*A review of CSAP scores from 2001 to 2005 showed the achievement gap widened on some tests and in some grades but narrowed in others.*

*Some schools with high numbers of minority and low-income students outperform schools with predominantly majority or high-income students.*

Colorado has a large, persistent achievement gap between students of different racial and economic backgrounds. Asian American and white students and students from middle-income to high-income families consistently score higher on tests measuring academic achievement than do American Indian, black, Hispanic and low-income students.

### Extent of the Achievement Gap

The achievement gap shows up on test results, including Colorado Student Assessment Program (CSAP) tests, National Assessment of Educational Progress (NAEP) tests, American College Testing Program (ACT) tests, and in Advanced Placement (AP) courses and high school graduation rates.

The Bell Policy Center's analysis of 2004 CSAP scores in the 2005 "Understanding Colorado's Achievement Gap" report shows that Asian American and white students outperformed black, Hispanic and American Indian students.

An average of test scores from all subjects and grade levels showed a 31-point spread between students from middle- to high-income families and students from low-income families.<sup>1</sup>

A later review of statewide CSAP scores from 2001 to 2005 showed the achievement gap narrowed on some tests and in some grades, but widened in others. Out of 24 comparisons, the Bell Policy Center found the gap narrowed in seven tests, remained the same in three tests and widened in 14 tests.<sup>2</sup>

Although these gaps are found across the state, some schools with high numbers of minority and low-income students are performing on par or better than schools with predominantly racial majority students and students from middle- to high-income families.

### Research on Closing the Gap

The Bell's analyses of the achievement gap show the problem is complex. There's no single explanation of its cause and no single recommendation to close it. Research identifying the causes and potential solutions falls into two broad categories:

**Research • Advocacy • Opportunity**

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- **Reform schools and education policy**
- **Improve economic and social well-being of students**

Research shows that quality teachers are the most significant factor in raising student performance. It also suggests that holding all students to high performance standards and assigning them challenging and rigorous coursework increases their performance.

In schools that have closed the achievement gap, principals serve as instructional leaders, focus attention on closing the gaps and challenge the status quo to improve student performance. These schools also use frequent and relevant tests to assess student progress and use the results to identify problems and tailor teaching methods to improve student performance.

Although the school setting is important, research also shows students' home environments play a substantial role in academic performance. Researchers at the RAND Corp. found that differences in family characteristics account for 75 percent of the differences in student test scores.<sup>3</sup>

Low-income students face a gap when they begin school because housing, health care and nutrition, all of which influence learning, vary based on family income. Low-income families tend to move more frequently and live in substandard housing, lack health coverage, do not always get treated for illnesses that affect learning, and cannot afford adequate nutrition vital to the development of children.

This research indicates that a broader approach is needed to close the achievement gap, including improving economic security for families, putting community health clinics in schools, and increasing access to high quality preschool programs and before-school and after-school programs for students from low-income families.

### **Eight Actions to Close Colorado's Achievement Gap**

Based on our analysis of the achievement gap data for Colorado and the research on its causes, the Bell Policy Center recommends the following actions for closing the achievement gap:

**1. Pursue strategies to promote opportunity for all Coloradans and move more people toward economic self-sufficiency.** Expanding health care coverage for more low-income families, making the state Earned Income Tax Credit permanent and raising the minimum wage will help alleviate poverty, one of the main causes of the achievement gap.

**2. Make quality preschool education available to all low-income families that choose to participate.** The Legislature should use Referendum C revenues to fully fund the Colorado Preschool Program, expanding the number of slots to accommodate the estimated 6,000 students who are eligible but cannot attend due to lack of funding.

**3. Ensure that pre-kindergarten through third grade classrooms have 18 or fewer students, and that small classes have appropriate services and technologies to benefit students.** Educational research shows that students in classes with 18 or fewer students in the primary grades consistently outperformed students in classes with 22 or more students.

**4. Recruit, retain and reward high quality teachers, especially in schools that serve high percentages of low-income students.** Research shows that high quality teachers are the most significant factor in improving

*Research shows that quality teachers are the most significant factor in raising student performance.*

*Students' home environments play a substantial role in academic performance.*

*The Bell Policy Center recommends eight actions to close the achievement gap:*

*1. Promote economic self-sufficiency*

*2. Make pre-school available to all kids*

*3. Keep class sizes small*

*4. Recruit, retain and reward high-quality teachers*

student performance. Providing the time and funding for ongoing professional development for all teachers is also critical to improving student performance.

The Denver Public Schools' new ProComp salary schedule, for example, links teacher pay to student achievement and provides incentives for teachers to improve their practice through formal education and professional development. If Pro-Comp proves effective in attracting high quality teachers to schools with a concentration of students from low-income families, the Colorado Department of Education should share the lessons learned and provide technical assistance to other districts that want to try similar approaches.

**5. Adjust the school finance formula to send more resources to schools with high concentrations of students from low-income families.** A national report from the Education Trust of Washington, D.C., in 2004 found the inverse to be true: Colorado school districts with large concentrations of students from low-income families received about \$402 less per student than districts with lower concentrations of these students.<sup>4</sup>

**6. Make 100 percent proficiency in reading by fourth grade a statewide priority.** Gov. Owens spearheaded creation of Read to Achieve, a program that identifies first and second grade students with reading difficulties and gives them extra support until they can read at grade level. The Joint Budget Committee's recommendation to restore cuts made in recent years is a step in the right direction.

**7. Modify Colorado's school accountability report to make closing the achievement gap and continuous academic growth the benchmarks against which schools, school districts and the state are judged.** When it comes to accountability, you measure what you value. Colorado's accountability reports, which are intended to judge school performance, do not include data on whether a school or district is closing the achievement gap.

**8. Assess why Colorado high school students are performing so poorly and make changes to improve performance.** Too many Colorado students drop out before graduation, too many require remedial classes when they start college and too many graduates are not sufficiently prepared for the work world. Efforts to better align high school graduation requirements with post-secondary entrance requirements and to meet the skill needs of businesses are a good start at addressing some of the problems with high schools.



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*5. Provide better funding for schools serving low-income families*

*6. Make reading skills a top priority*

*7. Make schools and districts account for progress in closing the achievement gap*

*8. Improve the post-graduate skills of high school students*

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## End Notes

<sup>1</sup> Jennifer Sharp Silverstein, Andrew Hartman, Angela Frye and Rich Jones, "Understanding Colorado's Achievement Gap", The Bell Policy Center, August 2005. Online: [www.thebell.org/pdf/AchievementGap05.pdf](http://www.thebell.org/pdf/AchievementGap05.pdf)

<sup>2</sup> "2005 CSAP Scores Show Limited Progress in Closing the Achievement Gap", The Bell Policy Center, August 2005. Online: [www.thebell.org/pdf/2005CSAP-GapAnalysis.pdf](http://www.thebell.org/pdf/2005CSAP-GapAnalysis.pdf)

<sup>3</sup> David W. Grissmer, Ann Flanagan, Jennifer H. Kawata, Stephanie Williamson, "Improving Student Achievement: What State NAEP Test Scores Tell Us", RAND, Santa Monica, California, 2000.

<sup>4</sup> Kevin Carey, "The Funding Gap 2004: Many States Short Change Low-income and Minority Students", The Education Trust, Fall 2004. Online: [www2.edtrust.org/NR/rdonlyres/30B3C1B3-3DA6-4809-AFB9-2DAACF11CF88/0/funding2004.pdf](http://www2.edtrust.org/NR/rdonlyres/30B3C1B3-3DA6-4809-AFB9-2DAACF11CF88/0/funding2004.pdf)