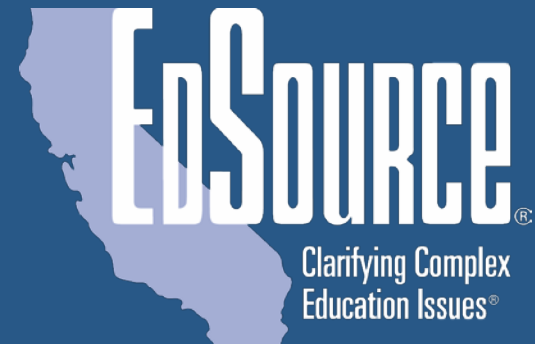




Preparation, Placement, Proficiency

*Improving Middle Grades
Math Performance*

Findings from the
follow-up analysis to
*Gaining Ground in the Middle Grades:
Why Some Schools Do Better*



Our analysis of Algebra I placements

- Middle grades math became a hot topic as we began the ***Gaining Ground in the Middle Grades*** study.
- We recognized early on that the 303 middle grades schools in our sample differed in how they placed 8th graders into Algebra I.
- This prompted a follow-up analysis, using our data file.
 - ***The centerpiece:*** An analysis of longitudinal data on the 7th and 8th grade math and Algebra I CST scores of 70,000 California students.

Findings from our placement analysis

8th graders' preparation in mathematics varied widely.

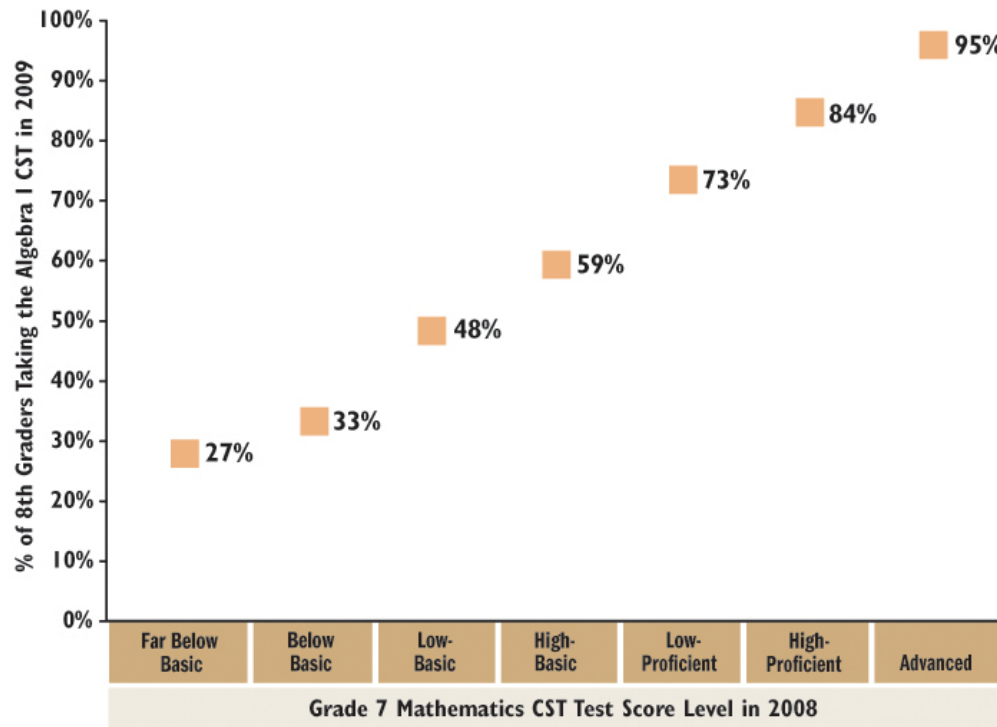
Prior-Year (2008) Achievement on the Grade 7 Mathematics CST, Among 69,663 8th Graders Enrolled in the 303 Sample Schools in 2009

| Five State-Defined CST Performance Levels | Seven Performance Levels Considered in Our Analysis | Percent of 8th Graders in the Sample (in 2009) Who Scored at Each Level on the Grade 7 Mathematics CST in 2008 (n=69,663) |
|---|---|---|
| Far Below Basic | Far Below Basic | 5% |
| Below Basic | Below Basic | 19% |
| Basic | Low-Basic | 15% |
| | High-Basic | 16% |
| Proficient | Low-Proficient | 15% |
| | High-Proficient | 16% |
| Advanced | Advanced | 13% |

Note: Percentages do not sum to 100% due to rounding.

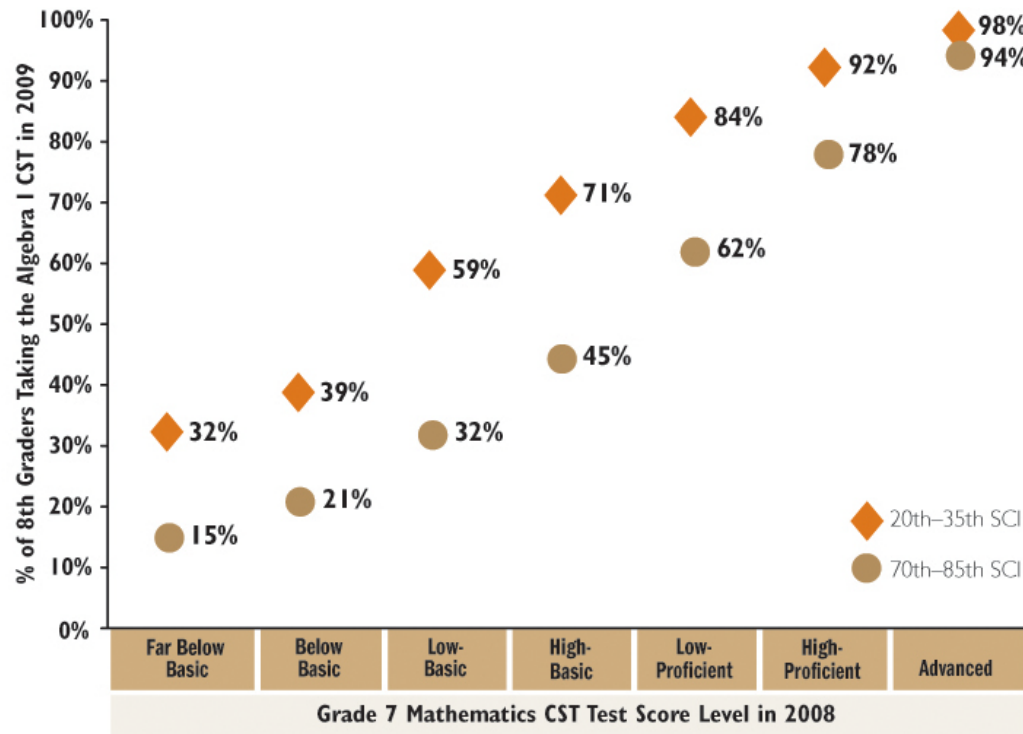
Findings from our placement analysis

Many 8th graders at low levels of preparation were placed into Algebra I.



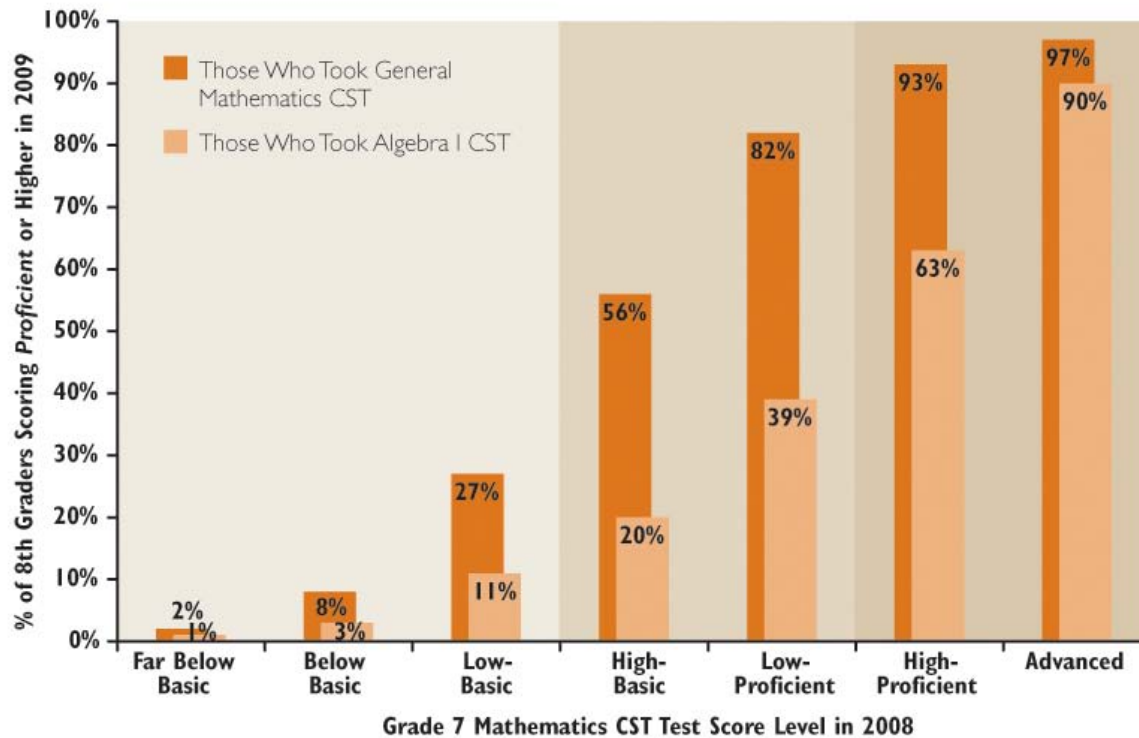
Findings from our placement analysis

□ Schools serving mostly low-income students placed greater percentages of 8th graders into Algebra I than did schools serving mostly middle-income students.



Findings from our placement analysis

Students' scores in grade 7 were a strong predictor of their grade 8 scores the following spring.



Findings from our placement analysis

From this analysis, we conclude:

- Placement in Algebra I in grade 8 for the state's most-prepared math students appears to have served them well.
- In addition, some students score well on the Algebra I CST despite their relatively low prior-year scores.
- However, a one size fits all approach of placing all 8th graders into Algebra I, regardless of their preparation, sets up many students to fail—even though their prospects could be predicted based on their 7th grade CST scores.

Learn more

Go to www.edsource.org for free downloads of the:

- **Math analysis** Policy and Practice Brief and full technical report, *available now*.
- *Gaining Ground in the Middle Grades* Narrative Summary, Initial Research Report, and Technical Appendices
- **UP NEXT: *Middle Grades Playbook: Leading a Full-Court Press on Student Achievement*** (an action guide for superintendents and principals) and other tools.