



CHILDHOOD RESILIENCE

Eighth Grade Math Proficiency

INDICATOR

Percent of students at the level of proficient in eighth grade mathematics.

Numerator	Number of students who scored 299 or higher in mathematics
Denominator	Eighth grade students in private and public schools, including students with disabilities and/or English language learners

DESCRIPTION

This metric looks at the percent of students who receive a proficient math score of 299 or higher, indicating that they can complete tasks in geometry, algebra, measurement, number properties, and probability.

IMPORTANCE

There are many potential measures of school readiness; however, eighth grade math performance scores have been significantly correlated with secondary school success and post-secondary readiness more accurately than any other metric (AIR, 2013). The National Assessment of Educational Progress (NAEP) tracks the mathematical skill of students across the US, making this a highly-utilized, comparable metric with available historical trends. Such trends in the NAEP metric can, over time, demonstrate the effects of educational and social policies across Wisconsin, the US, and other countries.

LIMITATIONS

- NAEP is not a longitudinal study, and each year includes a different cohort of children. We are not able to track trends in a single cohort of children across time.
- NAEP results should not be compared to individual state assessments, as they may track different achievement metrics.

ADDITIONAL ANALYSES

Wisconsin Analyses

Wisconsin scores remained steady since 2011, despite a national decline. Wisconsin ranks sixth across the US in percent proficient, and top 10 in percent advanced for eighth grade math, though racial differences are stark. Racial educational differences for eighth graders are only slightly better along the life course; 85% fewer black students meet the benchmark for proficiency in math, translating into around 30% fewer black students graduating high school, and 30% fewer black young adults with postsecondary education.

SOURCE

American Institutes for Research (AIR). (2013). Predictors of Postsecondary Success. Washington, DC. Retrieved from <https://www.cde.state.co.us/postsecondary/americaninstitutesforresearchpredictorsofpostsecondarysuccess>.
U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, NAEP, accessed at http://www.nationsreportcard.gov/reading_math_2015.

YEAR:		2015	
WI	US	Best	Worst
41%*	32%	51% MA	17% AL
PAST YEAR:		N/A	
WI	US		

* Indicates a statistically significant difference from the US value at $p < 0.05$.