

# Eighth Grade Math and Reading Assessment

## DEFINITION

This indicator reports the percent of eighth grade students scoring at or above proficient in math or reading on the October 2009 New England Common Assessment Program (NECAP) test.

## CONTEXT

New Hampshire students have been taking the NECAP test annually since 2005. The testing was mandated by the federal No Child Left Behind Act, which requires states to test students annually in reading, mathematics, writing and science in grades 3 through 8 and once in high school. The departments of education in New Hampshire, Rhode Island and Vermont collaborated to create the NECAP test measuring students' knowledge and skills relative to grade level expectations. Maine began using the NECAP assessment in 2009 (NH Department of Education 2011a).

These tests assess performance at four achievement levels: proficient with distinction, proficient, partially proficient or substantially below proficient. Performance at or above proficient indicates the student has sufficient mastery of content and skills from the previous grade to successfully begin working on current grade content and skills.

NECAP results can be used to compare student knowledge and skills within a school or among school districts in New Hampshire. Those who want to compare New Hampshire students to students in other states, however, must rely on the National Assessment of Educational Progress (NAEP), which tests a sample of students in each state. In 2009, New Hampshire 8th grade students ranked 6th among the states in the percent scoring at or above basic in math and 10th in the percent scoring at or above basic in reading on the NAEP (U.S. Department of Education). National Center for Education Statistics research finds most state proficiency standards for state assessment tests are substantially lower than NAEP assessment standards.

The majority of states, including New Hampshire, have adopted the Common Core State Standards in Mathematics and Literacy K-12. This means that New Hampshire will develop and adopt new assessments that will replace the NECAP beginning in 2014 (NH Department of Education 2011b).

**Eighth Grade NECAP Test Scores**  
By County, 2009

	Percent at or above Proficient and Rank			
	MATH		READING	
	Percent	Rank	Percent	Rank
<b>STATE TOTAL</b>	<b>66%</b>		<b>76%</b>	
Belknap County	64%	3	76%	3
Carroll County	62%	7	74%	6
Cheshire County	62%	7	76%	3
Coos County	57%	9	66%	10
Grafton County	71%	2	80%	2
Hillsborough County	63%	5	73%	7
Merrimack County	64%	3	76%	3
Rockingham County	72%	1	82%	1
Strafford County	63%	5	70%	9
Sullivan County	55%	10	71%	8



## NEW HAMPSHIRE FINDINGS

Sixty-six percent of New Hampshire's eighth grade students scored at or above proficient on the math NECAP exam and 76 percent scored at or above proficient on the reading exam. This is an improvement since 2005, the first year the exam was administered, when 56 percent of eighth graders scored at or above proficient in math and 62 percent scored at or above proficient in reading.

**Achievement levels differ markedly by county, however: Comparing the highest and lowest eighth grade math scores in the state, 72 percent of Rockingham County students scored at or above proficient while only 55 percent of Sullivan County scored at or above proficient. Rockingham County students also had the highest scores on reading, with 82 percent of eighth graders scoring proficient or above. Coos County students scored the lowest, with 66 percent of eighth graders attaining proficient and above. (see table on previous page)**

The NECAP shows a gap in test scores between white non-Hispanic students and Hispanic or black students, with 77 percent of New Hampshire's eighth grade white non-Hispanic students scoring proficient or above on reading but only 53 percent of New Hampshire's Hispanic and 55 of the state's black students scoring at that level. Similarly, there was a gap in mathematics scores with 67 percent of white non-Hispanic eighth graders scoring proficient or above, but only 39 percent of Hispanic and 39 percent of black eighth graders attaining the same test score level (de Mello, Blankenship and McLaughlin 2009).

## SOURCE OF DATA FOR ILLUSTRATION/METHODOLOGY

The New Hampshire Department of Education reports test scores by school district. The following methodology was used to estimate test scores by county. First, we identified each school district with grade eight students by county. Seven districts with eighth grade students crossed county borders, and special estimates were computed for those districts (see methodology in Appendix). Then district average test scores or estimated district average test scores were used to derive county average test scores by weighting each district by its enrollment or estimated enrollment.

New Hampshire Department of Education. 2010. [www.education.nh.gov/instruction/assessment/necap](http://www.education.nh.gov/instruction/assessment/necap)

## REFERENCES

- Bandeira de Mello, V., Blankenship, C., and McLaughlin, D.H. (2009). Mapping State Proficiency Standards onto NAEP Scales: 2005-2007 (NCES 2010-456). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. <http://nces.ed.gov/nationsreportcard/studies/statemapping/>
- New Hampshire Department of Education. 2011a. New England Common Assessment Program. [www.education.nh.gov/instruction/assessment/necap](http://www.education.nh.gov/instruction/assessment/necap)
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- New Hampshire Department of Education. 2010a. *Grade 12 Reading and Mathematics Results Released for 2009 National Assessment of Educational Progress (NAEP)*. November 18.
- New Hampshire Department of Education. 2010b. *New England Common Assessment Program (NECAP) Fall 2009 Test Results Released for Elementary, Middle and High School Students (Grades 3-8 & 11)*. January 28. [www.education.nh.gov/news/2010/20100128.htm](http://www.education.nh.gov/news/2010/20100128.htm).
- U.S. Department of Education. 2010. National Center for Education Statistics, National Assessment of Educational Progress (NAEP), NAEP Data Explorer: [www.nces.ed.gov/nationsreportcard/naepdata](http://www.nces.ed.gov/nationsreportcard/naepdata)