

Comparing Educational Outcomes

The U.S. Census Bureau estimates Vermont's per pupil K-12 spending at \$14,300 for FY08, 40% more than the national average. Only three states, New York, New Jersey, and Alaska, spend more (although the US Department of Education has Vermont ranked 6th, with virtually the same amount of spending). When ranked by education spending as a share of personal income, only Alaska devotes more of its citizen's resources to education.

There is no question that Vermont spends much more on education than nearly every other state in the nation. That leads to a second question, which is whether that spending leads to better educational outcomes. Vermont uses the NECAP tests to assess student performance, but that test is only used by three other states (RI, NH, and ME) so it is not a good metric to use.

The U.S. DOE does test a sample of students in every state using the National Assessment of Education Progress (NAEP) and we now have detailed comparable data for all 50 states for 2009.

In the aggregate, Vermont students perform comparatively well on the NAEP tests, with state scores for the entire student population consistently better than the national average. Moreover, Vermont generally ranks among the top five or ten states. The level of performance (although not the ranking) can be seen for all three tests (math, reading, and writing) at both 4th and 8th grade levels by comparing the US to VT scores in the first two rows of each of the three panels in the adjoining table.

But Vermont's student profile is very different from for the nation as a whole. Vermont's students are 95% White, with only 5% ethnic or racial minorities. Nationally, only 56% of the students enrolled in schools are White and 44% are racial or ethnic minorities. Therefore, it is important to control for these differences, which we do in the table.

In 4th grade math, for example, Vermont students outperform their peers, with an overall score of 248 compared to 239 for the nation. But Vermont schools are overwhelmingly White and when we compare Vermont's White student scores (not shown in the table since they are identical to the aggregate Vermont scores) to the national White score of 248, they are identical.

In the past, when we have written about these test scores, some have argued that this does not account

2009 NAEP Scale Score Test Results

	<u>Grade 4 Math</u>	<u>Grade 8 Math</u>
US	239	283
VT	248	293
US White	248	293
Low Income US	228	266
Low Income VT	235	277
Low Inc White US	239	276
Low Inc White VT	236	277
	<u>Grade 4 Reading</u>	<u>Grade 8 Reading</u>
US	221	264
VT	229	272
US White	230	273
Low Income US	206	249
Low Income VT	215	260
Low Inc White US	215	258
Low Inc White VT	216	259
	<u>Grade 4 Writing</u>	<u>Grade 8 Writing</u>
US	154	156
VT	158	162
US White	161	164
Low Income US	141	141
Low Income VT	143	144
Low Inc White US	147	147
Low Inc White VT	142	143

Source: US Department of Education

for rural (White) poverty in Vermont. In the table we also look at this issue. Vermont does do better than the national average for low income students (235 for VT versus 228 for US in 4th grade math). But when we further decompose the low income student population by race and ethnicity, we find that the Vermont advantage disappears. Vermont's low income White students do slightly worse (236) than low income White students (239) nationally. For most of the other tests, the Vermont scores are either identical or slightly worse than their national peers.

We conclude from this that Vermont's above average spending does not lead to above-average scores on any of the available NAEP tests. And the absolute level of these scale scores leaves much to be desired. When translated into relative terms, one-quarter of Vermont students perform below the basic level of what is deemed grade-level work and only between one-third and one-half are characterized by the NAEP statisticians as performing at a proficient or advanced level. ■