# Vermont Student Performance in a National Context

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## Vermont is Different: Students by Race and Ethnicity

	United States	Vermont		
White	48.2%	90.7%		
Black	15.3%	2.0%		
Hispanic	26.4%	1.9%		
Digest of Education Statistics 2018, Table 203.70, fall 2016 data				

## 4<sup>th</sup> Grade Math NAEP Percent Proficient or Above

	United States	Vermont	Vermont Rank
All Students	40%	39%	#33
White Students	52%	40%	#47

Note: Rank is highest to lowest for all slides

## Vermont and US: Race and Ethnicity

## 8<sup>th</sup> Grade Math NAEP Percent Proficient or Above

	United States	Vermont	Vermont Rank
All Students	33%	38%	#11
White Students	43%	39%	#31

## 4th Grade Reading NAEP Percent Proficient or Above

	United States	Vermont	Vermont Rank
All Students	34%	37%	#15
White Students	44%	37%	#44

## 8th Grade Reading NAEP Percent Proficient or Above

	United States	Vermont	Vermont Rank
All Students	32%	40%	#4
White Students	41%	41%	#25

## 4th Grade Science NAEP (2015) Percent Proficient or Above

	United States	Vermont	Vermont Rank
All Students	37%	48%	#2
White Students	50%	49%	#25

## 8th Grade Science NAEP (2015) Percent Proficient or Above

	United States	Vermont	Vermont Rank
All Students	33%	44%	#5
White Students	46%	45%	#21

Vermont and US: Poverty, Race and Ethnicity

### 4<sup>th</sup> Grade Math NAEP Percent Proficient or Above Low Income Students

	United States White	Vermont White	Vermont Rank
Free and Reduced Price Lunch Eligible	35%	28%	#48
Not eligible	61%	48%	#49

### 8<sup>th</sup> Grade Math NAEP Percent Proficient or Above Low Income Students

	United States White	Vermont White	Vermont Rank
Free and Reduced Price Lunch Eligible	24%	23%	#30
Not eligible	51%	47%	#32

### 4<sup>th</sup> Grade Reading NAEP Percent Proficient or Above Low Income Students

	United States White	Vermont White	Vermont Rank
Free and Reduced Price Lunch Eligible	28%	21%	#49
Not eligible	53%	47%	#42

## 8<sup>th</sup> Grade Reading NAEP Percent Proficient or Above Low Income Students

	United States White	Vermont White	Vermont Rank
Free and Reduced Price Lunch Eligible	26%	29%	#12
Not eligible	48%	47%	#23

#### Other Measures of Student Performance:

High School Dropouts as Percent of 16-24 Year-Olds 2013-2017

	United States	Vermont	Vermont Rank
All	6.0%	4.0%	#7
White	4.5%	3.9%	#21
2018 Digest of Education Statistics, Table 219.85b			

## U.S. and Vermont Comparisons

	<b>United States</b>	Vermont	Vermont Rank
Student/Teacher Ratio fall 2016	16.0	10.8	#1 lowest
Student/Staff Ratio fall 2016	7.8	4.9	#1 lowest
Average Elementary Class Size 2011-12	21.2	16.6	#1 lowest
Average High School Class Size 2011-12	26.8	19.8	#4 lowest
Average Teacher Salary 2017-18	\$60,483	\$58,527	#15 highest
Pct of Teachers with Master's Degree 2011-12	47.7%	52.0%	#15 highest (46 states)
Pct of Students IDEA 2017-18	13.7%	16.7%	#9 highest
Pct of Students ELL 2016-17	9.6%	1.7%	#2 lowest
Pct of Students FRL 2015-16	52.1%	38.4%	#9 lowest
Spending per Student 2015-16	\$11,841	\$19,023	#4 highest

### Conclusions: Compared to the U.S.

- Vermont is very different demographically
- Demographic characteristics point to better student outcomes
- Demographic-adjusted outcomes are not better
- Vermont's K-12 education spending is one of the highest in the nation
- Taxpayers spend a lot for average performance at best

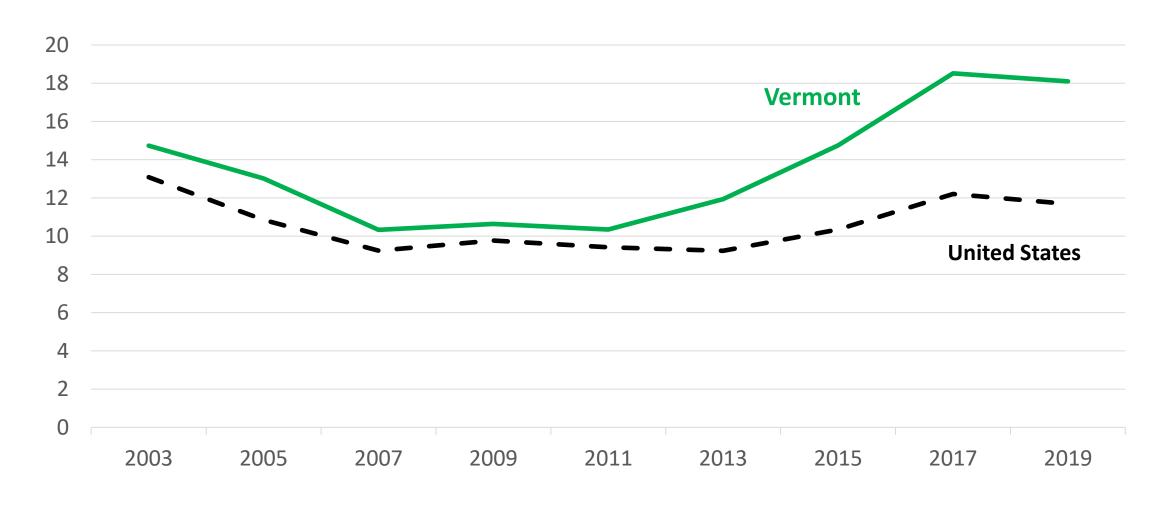
## Thank you

Supplemental slides follow

#### 2019 NAEP: Percent Below Basic

Grade and Test	United States White Students	Vermont White Students	Vermont Rank
4 <sup>th</sup> Grade Math	12%	18%	#2
4 <sup>th</sup> Grade Reading	24%	31%	#5
8 <sup>th</sup> Grade Math	21%	24%	#13
8 <sup>th</sup> Grade Reading	19%	22%	#9
4 <sup>th</sup> Grade Science (2015)	12%	14%	#14
8 <sup>th</sup> Grade Science (2015)	19%	19%	#24

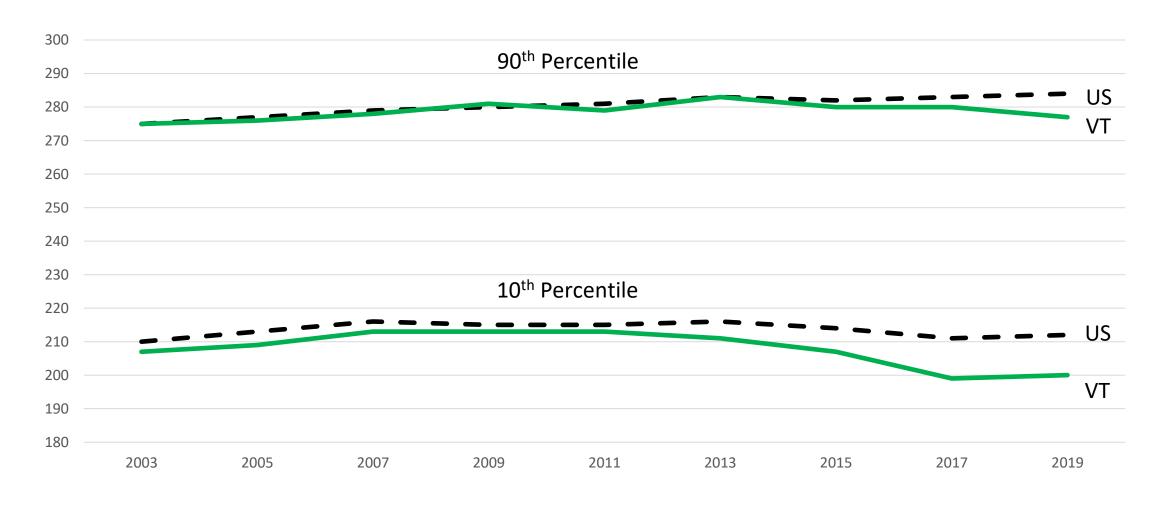
## 4<sup>th</sup> Grade Math: Percent of White Students Below Basic



## Gender Issues: 4<sup>th</sup> Grade Math

	U.S.	Vermont	
	Percent Proficient or Above		
White Boys	55%	42%	
White Girls	49%	37%	
	Percent Below Basic		
White Boys	11%	17%	
White Girls	12%	19%	

## 4<sup>th</sup> Math 10<sup>th</sup> and 90<sup>th</sup> Percentiles White Students



## 4<sup>th</sup> Grade Math Sample Question, Medium Level of Difficulty

A rule for a number pattern is shown in the box.

After the first number, each number in the pattern is 7 more than the previous number.

Which of the following number patterns follows the rule?



Clear Answer

## 8<sup>th</sup> Grade Math Sample Question, Hard Level of Difficulty

The sale price of milk at a store is 25 percent off the regular price.

Which of the following statements describes the sale price of milk at the store?

АО	$\frac{1}{25}$ off the regular price	-
вО	$\frac{1}{5}$ off the regular price	-
сО	$\frac{1}{4}$ off the regular price	-
DO	$\frac{1}{3}$ off the regular price	-
ЕΟ	$\frac{2}{5}$ off the regular price	-

Clear Answer

#### NAEP Basic (214)

Fourth-grade students performing at the *NAEP Basic* level should show some evidence of understanding the mathematical concepts and procedures in the five NAEP content areas.

Fourth-graders performing at the *NAEP Basic* level should be able to estimate and use basic facts to perform simple computations with whole numbers, show some understanding of fractions and decimals, and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use—though not always accurately—four-function calculators, rulers, and geometric shapes. Their written responses will often be minimal and presented without supporting information.

## NAEP Proficient (249)

Fourth-grade students performing at the *NAEP Proficient* level should consistently apply integrated procedural knowledge and conceptual understanding to problem solving in the five NAEP content areas.

Fourth-graders performing at the *NAEP Proficient* level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the *NAEP Proficient* level should employ problemsolving strategies such as identifying and using appropriate information. Their written solutions should be organized and presented both with supporting information and explanations of how they were achieved.