## Subgroup Achievement and Gap Trends — Vermont

K-12 enrollment — 92,572

The raw data used to develop these state profiles, including data for additional grade levels and years before 2002, can be found on the CEP Web site at <u>www.cep-dc.org</u>. Click on the link on the left labeled State Testing Data. In the list of results that appears, look for the most recent report on student achievement since 2002. Below the name of the report, click on the link for State Profiles and Worksheets. Scroll down the page until you reach the list of states. Click on the Worksheet link for proficiency data or scale score data for a particular state.

#### Subgroup Achievement and Gap Trends — Key Findings

**Summary.** Vermont's demographic profile is such that achievement trends could only be determined for white, male and female, and low-income student subgroups. In grade 8 (the only grade in which subgroup trends were analyzed by achievement level), the white, low-income, male and female subgroups made progress at the *proficient-and-above*, and *advanced* levels in reading and math but showed some declines at the *basic* level. Progress in narrowing achievement gaps between low-income and non-low-income students and between boys and girls at grades 4 and 8 was mixed. Comparable data were available for 2006-2009 at grades 4 and 8, however, there were not enough years of data to discern trends at grade 11.

• **Gender gap widened.** Girls outperformed boys in reading, at both the 4<sup>th</sup> and 8<sup>th</sup> grades. This performance gap widened at grade 4, however, is narrowing at grade 8.

### **Data Limitations**

Years of comparable percentage proficient data	2006 through 2009, grades 3 through 8 2008-2009, grade 11
Years of comparable mean scale score data	2006 through 2009, grades 3 through 8 2008-2009, grade 11
Disaggregated data for all subgroups and comparison groups	Data for some student subgroups in some years suppressed due to small N-Counts (N<10). Data for students who are <i>not</i> English language learners (ELLs) not available until 2007.

## **Test Characteristics**

The characteristics highlighted below are for the state reading and mathematics tests used for accountability under the No Child Left Behind Act (NCLB).

Test(s) used for NCLB accountability	New England Common Assessment Program Vermont Alternate Assessment (alternate assessment of alternate standards)
Grades tested for NCLB accountability	3–8, 11 (NECAP)
State labels for achievement levels	VT uses four achievement levels: Substantially Below Proficient, Partially Proficient, Proficient, and Proficient with Distinction. For our analyses we treated Partially Proficient as Basic, Proficient as Proficient, and Proficient with Distinction as Advanced.
High school NCLB test also used as an exit exam?	No
First year test used	2005-06, grades 3-8; 2007-08, grade 11
Time of test administration	Fall
Major changes in testing system (2002–present)	<ul> <li>2005–06: Switched to new assessment system (NECAP), a collaboration with Maine, New Hampshire, and Rhode Island; replaced NSRE assessments</li> <li>Fall 2006: NECAP grade 11 assessment piloted</li> <li>Fall 2007: NECAP grade 11 assessment administered</li> </ul>

### Achievement by Subgroup — Trends at the Middle School Level

**Note:** The tables in this profile of subgroup achievement and gap trends begin with table 7. Tables 1 through 6 can be found in the companion state profile of general achievement trends.

_				Reporti	ng year				Average yearly
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>
				All tested st	tudents				· · · ·
Advanced					13%	12%	18%	17%	1.3
Proficient-and-above					65%	65%	69%	69%	1.3
Basic-and-above					90%	89%	90%	90%	0.0
				White	Э				
Advanced					13%	12%	18%	17%	1.3
Proficient-and-above					66%	66%	69%	70%	1.3
Basic-and-above					91%	89%	90%	91%	0.0
				African Am	erican <sup>2</sup>				
Advanced					4%	9%	7%	8%	1.3
Proficient-and-above					50%	52%	48%	58%	2.7
Basic-and-above					87%	77%	79%	82%	-1.7
				Latino	$)^2$				
Advanced					NA	11%	6%	14%	1.5
Proficient-and-above					NA	55%	69%	68%	6.5
Basic-and-above					NA	88%	88%	89%	0.5
				Asian	2				
Advanced					13%	23%	30%	37%	8.0
Proficient-and-above					62%	73%	81%	85%	7.7
Basic-and-above					84%	93%	96%	94%	3.3
				Native Ame	erican <sup>2</sup>				
Advanced					6%	4%	NA	0%	-2.0
Proficient-and-above					22%	43%	NA	44%	7.3
Basic-and-above					72%	64%	NA	88%	5.3

# Table VT-7. Percentages of grade 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in reading

Table reads: The percentage of white 8<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 13% in 2006 to 17% in 2009. During this period, the average yearly gain in the percentage advanced in reading for white 8<sup>th</sup> graders was 1.3 percentage points per year.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

				Reporti	ng year				Average yearly
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>
				All tested s	tudents				
Advanced					13%	12%	18%	17%	1.3
Proficient-and-above					65%	65%	69%	69%	1.3
Basic-and-above					90%	89%	90%	90%	0.0
				Low-income	students				
Advanced					4%	5%	8%	6%	0.7
Proficient-and-above					46%	47%	52%	51%	1.7
Basic-and-above					82%	79%	81%	81%	-0.3
				Students with a	disabilities <sup>3</sup>				
Advanced					1%	0%	2%	1%	0.0
Proficient-and-above					21%	13%	21%	18%	-1.0
Basic-and-above					58%	46%	56%	54%	-1.3
			E	English languag	e learners <sup>2,3</sup>				
Advanced					3%	4%	10%	6%	1.0
Proficient-and-above					40%	51%	55%	44%	1.3
Basic-and-above					77%	81%	79%	77%	0.0
				Fema	le				
Advanced					18%	16%	25%	22%	1.3
Proficient-and-above					72%	73%	77%	74%	0.7
Basic-and-above					93%	93%	94%	92%	-0.3
				Male	)				
Advanced					8%	8%	11%	12%	1.3
Proficient-and-above					59%	58%	62%	64%	1.7
Basic-and-above					87%	85%	87%	88%	0.3

# Table VT-8. Percentage of grade 8 students by demographic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in reading

Table reads: The percentage of low-income 8<sup>th</sup> graders who scored at the advanced level on the state reading test increased from 4% in 2006 to 6% in 2009. During this period, the average yearly gain in the percentage advanced in reading for low-income 8<sup>th</sup> graders was 0.7 percentage points per year.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2009 results.

# Table VT-9. Percentages of grade 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

_				Reporti	ng year				Average yearly
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>
				All tested st	tudents				· •
Advanced					17%	17%	18%	21%	1.3
Proficient-and-above					60%	59%	59%	63%	1.0
Basic-and-above					81%	77%	80%	82%	0.3
				White	e				
Advanced					17%	17%	18%	21%	1.3
Proficient-and-above					60%	60%	59%	63%	1.0
Basic-and-above					81%	78%	80%	81%	0.0
				African Am	erican <sup>2</sup>				
Advanced					4%	12%	8%	9%	1.7
Proficient-and-above					37%	40%	37%	44%	2.3
Basic-and-above					71%	60%	57%	67%	-1.3
				Latino	$p^2$				
Advanced					NA	13%	13%	18%	2.5
Proficient-and-above					NA	53%	55%	53%	0.0
Basic-and-above					NA	70%	78%	76%	3.0
				Asian	2	•			
Advanced					17%	30%	34%	48%	10.3
Proficient-and-above					69%	67%	77%	82%	4.3
Basic-and-above					86%	87%	96%	91%	1.7
				Native Ame	erican <sup>2</sup>				
Advanced					9%	4%	NA	0%	-3.0
Proficient-and-above					22%	36%	NA	25%	1.0
Basic-and-above					63%	43%	NA	69%	2.0

Table reads: The percentage of white 8<sup>th</sup> graders who scored at the advanced level on the state math test increased from 17% in 2006 to 21% in 2009. During this period, the average yearly gain in the percentage advanced in math for white 8<sup>th</sup> graders was 1.3 percentage points per year.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

# Table VT-10. Percentage of grade 8 students by demographic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

_				Reporti	ng year				Average yearly
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	percentage point gain <sup>1</sup>
				All tested s	tudents				· · ·
Advanced					17%	17%	18%	21%	1.3
Proficient-and-above					60%	59%	59%	63%	1.0
Basic-and-above					81%	77%	80%	82%	0.3
				Low-income	students				
Advanced					7%	6%	7%	7%	0.0
Proficient-and-above					41%	40%	39%	42%	0.3
Basic-and-above					67%	63%	66%	67%	0.0
				Students with a	disabilities <sup>3</sup>				
Advanced					1%	0%	1%	1%	0.0
Proficient-and-above					16%	12%	13%	14%	-0.7
Basic-and-above					37%	26%	35%	34%	-1.0
			E	inglish languag	e learners <sup>2,3</sup>				
Advanced					8%	9%	11%	10%	0.7
Proficient-and-above					32%	43%	49%	42%	3.3
Basic-and-above					63%	64%	70%	70%	2.3
				Fema	le				
Advanced					17%	17%	17%	21%	1.3
Proficient-and-above					62%	62%	60%	64%	0.7
Basic-and-above					83%	79%	81%	82%	-0.3
				Male	9				
Advanced					17%	17%	19%	21%	1.3
Proficient-and-above					58%	57%	57%	61%	1.0
Basic-and-above					79%	75%	78%	80%	0.3

Table reads: The percentage of low-income 8<sup>th</sup> graders who scored at the advanced level on the state math test remained the same at 7% in 2006 and in 2009. During this period, the average yearly change in the percentage advanced in math for low-income 8<sup>th</sup> graders was 0.0 percentage points per year.

<sup>1</sup>Averages are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

<sup>3</sup>Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2009 results.

### Achievement by Subgroup — Gap Trends (Percentages Proficient)

#### Table VT-11. Subgroup achievement trends in reading by percentages proficient

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group. If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

			Grad	de 4				Grade	8				Grade	11	
Subgroup	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group
All tested students	06-09	69%	69%	0.0		06-09	65%	69%	1.3		08-09	68%	72%	NA	
White	06-09	70%	70%	0.0		06-09	66%	70%	1.3		08-09	68%	72%	NA	
African American	06-09	57%	54%	-1.0 <sup>2</sup>	S	06-09	50%	58%	2.7 <sup>2</sup>	L	08-09	44%	59%	NA	NA
Latino	07-09	59%	71%	6.0 <sup>2</sup>	L	07-09	55%	68%	6.5 <sup>2</sup>	L	08-09	70%	69%	NA	NA
Asian	06-09	71%	76%	1.7 <sup>2</sup>	L	06-09	62%	85%	7.7 <sup>2</sup>	L	08-09	65%	64%	NA	NA
Native American	07-09	35%	33%	-1.0 <sup>2</sup>	S	06-09	22%	44%	7.3 <sup>2</sup>	L	08-09	54%	56%	NA	NA
Not low-															
income	06-09	77%	78%	0.3		06-09	72%	76%	1.3		08-09	73%	76%	NA	
Low-income	06-09	52%	53%	0.3	E	06-09	46%	51%	1.7	L	08-09	47%	55%	NA	NA
Not disabled	06-09	73%	76%	1.0		06-09	70%	77%	2.3		08-09	74%	79%	NA	
Students with disabilities <sup>3</sup>	06-09	27%	25%	-0.7	S	06-09	21%	18%	-1.0	S	08-09	15%	21%	NA	NA
Not ELLs	07-09	68%	70%	1.0		07-09	65%	69%	2.0		08-09	68%	72%	NA	
English language learners <sup>3</sup>	07-09	54%	46%	-4.0 <sup>2</sup>	S	07-09	51%	44%	-3.5 <sup>2</sup>	S	08-09	36%	25%	NA	NA
	04.05	700	756			04.05	700	7.46				756	700		
Female Male	06-09	72% 65%	75% 65%	1.0 0.0	S	06-09 06-09	72% 59%	74% 64%	0.7 1.7	L	08-09 08-09	75% 59%	79% 65%	NA NA	NA
IVIDIE	00-09	00%	00%	0.0	3	00-09	J7/0	04 /0	1.7	L	00-09	J7/0	0576	NA	INA

Table reads: In 2006, 70% of white 4<sup>th</sup> graders and 57% of African American 4<sup>th</sup> graders scored at the proficient level on the state reading test. In 2009, 70% of white 4<sup>th</sup> graders and 54% of African American 4<sup>th</sup> graders scored at the proficient level in reading. Between 2006 and 2009, the percentage proficient did not change for white students and declined at an average rate of 1.0 percentage points per year for African American students, indicating a smaller rate of gain and a widening of the achievement gap for African American 4<sup>th</sup> graders.

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group. If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

			Gra	de 4				Grade	8		Grade 11				
Subgroup	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group	Year span	Starting PP	Ending PP	Average annual gain <sup>1</sup>	Gain larger or smaller than comparison group
All tested students	06-09	64%	69%	1.7		06-09	60%	63%	1.0		08-09	30%	35%	NA	
White	06-09	66%	69%	1.0		06-09	60%	63%	1.0		08-09	30%	36%	NA	
African American	06-09	37%	39%	0.7 <sup>2</sup>	S	06-09	37%	44%	2.3 <sup>2</sup>	L	08-09	12%	10%	NA	NA
Latino	07-09	50%	70%	10.0 <sup>2</sup>	L	07-09	53%	53%	0.0 <sup>2</sup>	S	08-09	16%	29%	NA	NA
Asian	06-09	69%	78%	3.0 <sup>2</sup>	L	06-09	69%	82%	4.3 <sup>2</sup>	L	08-09	34%	41%	NA	NA
Native American	07-09	29%	33%	2.0 <sup>2</sup>	L	06-09	22%	25%	1.0 <sup>2</sup>	E	08-09	10%	18%	NA	NA
Not low-															
income	06-09	73%	77%	1.3		06-09	66%	71%	1.7		08-09	33%	39%	NA	
Low-income	06-09	47%	52%	1.7	L	06-09	41%	42%	0.3	S	08-09	15%	17%	NA	NA
Not disabled	06-09	68%	74%	2.0		06-09	64%	70%	2.0		08-09	33%	39%	NA	
Students with disabilities <sup>3</sup>	06-09	27%	26%	-0.3	S	06-09	16%	14%	-0.7	S	08-09	2%	3%	NA	NA
Not ELLS	07-09	64%	69%	2.5		07-09	60%	63%	1.5		08-09	30%	35%	NA	
English language learners <sup>3</sup>	07-09	46%	48%	1.0 <sup>2</sup>	S	07-09	43%	42%	-0.5 <sup>2</sup>	S	08-09	8%	6%	NA	NA
Famala	0( 00		(00)			0( 00	( )0(	( 40/	0.7		00.00	2001	2.40/		
Female Male	06-09 06-09	64% 65%	69% 68%	1.7 1.0	S	06-09 06-09	62% 58%	64% 61%	0.7 1.0	L	08-09 08-09	29% 30%	34% 35%	NA NA	NA
	1				=			2 0		=	1				

Table reads: In 2006, 66% of white 4<sup>th</sup> graders and 37% of African American 4<sup>th</sup> graders scored at the proficient level on the state math test. In 2009, 69% of white 4<sup>th</sup> graders and 39% of African American 4<sup>th</sup> graders scored at the proficient level in math. Between 2006 and 2009, the percentage proficient improved at an average rate of 1.0 percentage points per year for white students and 0.7 percentage points per year for African American students, indicating a smaller rate of gain and a widening of the achievement gap for African American 4<sup>th</sup> graders.

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

## Achievement by Subgroup — Gap Trends (Mean Scale Scores)

#### Table VT-13. Achievement gap trends in reading by mean scale scores

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group. MSS = mean scale score. SD = standard deviation. If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

				Gra	ide 4				Grad	e 8				Grade	e 11	
Subgroup	Statistic	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group
All tested students	MSS	06-09	445	445	0.0		06-09	845	846	0.3		08-09	1144	1146	NA	
	SD	06-09	11.9	13.6			06-09	12.7	14.0			08-09	11.8	12.2		
White	MSS	06-09	445	445	0.0		06-09	845	846	0.3		08-09	1144	1146	NA	
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
African American	MSS	06-09	439	438	-0.3 <sup>2</sup>	S	06-09	841	841	0.0 <sup>2</sup>	S	08-09	1135	1140	NA	NA
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Latino	MSS	07-09	443	445	1.0 <sup>2</sup>	L	07-09	844	845	0.5 <sup>2</sup>	L	08-09	1143	1144	NA	NA
	SD	07-09	NA	NA			07-09	NA	NA			08-09	NA	NA		
Asian	MSS	06-09	447	450	1.0 <sup>2</sup>	L	06-09	845	853	2.7 <sup>2</sup>	L	08-09	1144	1145	NA	NA
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Native American	MSS	07-09	436	436	0.0 <sup>2</sup>	E	06-09	835	839	1.3 <sup>2</sup>	L	08-09	1141	1140	NA	NA
	SD	07-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Not low-income	MSS	06-09	447	448	0.3		06-09	847	849	0.7		08-09	1145	1147	NA	
Notiow-income	SD	06-09	NA	440 NA	0.5		06-09	NA	NA	0.7		08-09	NA	NA	NA	
Low-income	MSS	06-09	440	440	0.0	S	06-09	839	840	0.3	S	08-09	1139	1140	NA	NA
Low moome	SD	06-09	NA	NA	0.0	5	06-09	NA	NA	0.5	5	08-09	NA	NA	NA	NA
N P. 11. 1	1400						<u> </u>					00.00				
Not disabled	MSS	06-09	446	447	0.3		06-09	846	849	1.0		08-09	1146	1148	NA	
o	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Students with disabilities <sup>3</sup>	MSS SD	06-09 06-09	432	430	-0.7	S	06-09 06-09	830	829	-0.3	S	08-09 08-09	1130	1130	NA	NA
	30	00-09	NA	NA			00-09	NA	NA			00-09	NA	NA		
Not ELLs	MSS	07-09	445	445	0.0		07-09	845	846	0.5		08-09	1144	1146	NA	NA
	SD	07-09	NA	NA			07-09	NA	NA			08-09	NA	NA		
English language learners <sup>3</sup>	MSS	07-09	438	436	-1.0 <sup>2</sup>	S	07-09	839	838	-0.5 <sup>2</sup>	S	08-09	1132	1133	NA	NA
	SD	07-09	NA	NA			07-09	NA	NA			08-09	NA	NA		
Female	MSS	06-09	446	447	0.3		06-09	847	040	0.7		08-09	1147	1148	NA	
i emale	SD	06-09		447	0.3		06-09		849	0.7		08-09			NA	
Male	SD MSS	06-09	NA	NA 442	0.0	S	06-09	NA 042	NA	0.7	F	08-09	NA	NA	NIA	NIA
Walt	SD	06-09	443 NA	443 NA	0.0	S	06-09	842 NA	844 NA	0.7	E	08-09	1142 NA	1143 NA	NA	NA
	30	00-09	INA	NA			00-09	INA	NA			00-09	NA	NA		

Table reads: In 2006, the mean scale score on the state 4<sup>th</sup> grade reading test was 445 for white students and 439 for African American students. In 2009, the mean scale score in 4<sup>th</sup> grade reading was 445 for white students and 438 for African American students. Between 2006 and 2009, the mean scale score did not change for white students and declined at an average yearly rate of 0.3 points for African American students, indicating a widening of the achievement gap for African Americans.

Note: The NECAP is scored on a scale of 00-80 (expressed as a 3-digit number with 1<sup>st</sup> digit representing grade level; e.g., a score of 33 in 6<sup>th</sup> grade = 633).

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

#### Table VT-14. Achievement gap trends in mathematics by mean scale scores

*NOTE:* L = larger gain than comparison group. S = smaller gain than comparison group. E = equal gain to comparison group. MSS = mean scale score. SD = standard deviation. If the average gain for the subgroup of interest, such as African American students, is larger than the average gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

				Gra	ide 4				Grad	e 8				Grade	e 11	
Subgroup	Statistic	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS <sup>1</sup>	Gain larger or smaller than comp. group
All tested students	MSS	06-09	444	445	0.3		06-09	842	842	0.0		08-09	1134	1135	NA	
	SD	06-09	12.4	12.6	010		06-09	10.8	11.0	010		08-09	10.7	10.2		
White	MSS	06-09	444	445	0.3		06-09	842	842	0.0		08-09	1134	1135	NA	
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
African American	MSS	06-09	435	435	0.0 <sup>2</sup>	S	06-09	837	837	0.0 <sup>2</sup>	E	08-09	1125	1129	NA	NA
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Latino	MSS	07-09	440	445	2.5 <sup>2</sup>	L	07-09	840	840	0.0 <sup>2</sup>	Е	08-09	1131	1133	NA	NA
	SD	07-09	NA	NA			07-09	NA	NA			08-09	NA	NA		
Asian	MSS	06-09	446	448	0.7 <sup>2</sup>	L	06-09	842	849	2.3 <sup>2</sup>	L	08-09	1134	1137	NA	NA
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Native American	MSS	07-09	433	435	1.0 <sup>2</sup>	L	06-09	836	833	-1.0 <sup>2</sup>	S	08-09	1131	1131	NA	NA
	SD	07-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Net loss for any a	MCC	04.00					0( 00		0.15			00.00	4405	1107		
Not low-income	MSS	06-09	447	448	0.3		06-09	843	845	0.7		08-09	1135	1137	NA	
Levela e en e	SD	06-09	NA	NA		-	06-09	NA	NA		-	08-09	NA	NA		
Low-income	MSS	06-09	439	439	0.0	S	06-09	837	837	0.0	S	08-09	1129	1131	NA	NA
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Not disabled	MSS	06-09	445	447	0.7		06-09	843	845	0.7		08-09	1136	1137	NA	
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Students with disabilities <sup>3</sup>	MSS	06-09	433	432	-0.3	S	06-09	829	829	0.0	S	08-09	1120	1123	NA	NA
	SD	06-09	NA	NA			06-09	NA	NA			08-09	NA	NA		
Not ELLs	MSS	07-09	443	445	1.0		07-09	841	842	0.5		08-09	1134	1135	NA	
	SD	07-09	NA	NA			07-09	NA	NA			08-09	NA	NA		
English language learners <sup>3</sup>	MSS	07-09	438	438	0.0 <sup>2</sup>	S	07-09	837	837	0.0 <sup>2</sup>	S	08-09	1124	1128	NA	NA
	SD	07-09	NA	NA			07-09	NA	NA			08-09	NA	NA		
Female	MSS	06-09	444	445	0.3		06-09	842	843	0.3		08-09	1134	1135	NA	
i cinulo	SD	06-09	444 NA	445 NA	0.5		06-09	842 NA	843 NA	0.5		08-09	NA	NA	NA	
Male	MSS	06-09	NA 444	NA 445	0.3	E	06-09	NA 841	NA 842	0.3	E	08-09	1134	1135	NA	NA
Willio	SD	06-09	444 NA	445 NA	0.5	E	06-09	84 I NA	842 NA	0.5	E	08-09	NA	NA	INA	NA
	50	00.07	NA	NA			00.07	NA	NA			00.07	NA	NA		

Table reads: In 2006, the mean scale score on the state 4<sup>th</sup> grade math test was 444 for white students and 435 for African American students. In 2009, the mean scale score in 4<sup>th</sup> grade math was 445 for white students and 435 for African American students. Between 2006 and 2009, the mean scale score improved at an

#### SUBGROUP ACHIEVEMENT AND GAP TRENDS — VERMONT

average yearly rate of 0.3 points for white students and did not change for African American students, indicating a widening of the achievement gap for African Americans.

Note: The NECAP is scored on a scale of 00-80 (expressed as a 3-digit number with 1<sup>st</sup> digit representing grade level; e.g., a score of 33 in 6<sup>th</sup> grade = 633).

<sup>1</sup>Numbers in these columns are subject to rounding error.

<sup>2</sup>The number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

2010

				Grade	9 4				Grade	e 8				Grade	e 11	
Subgroup	Subject	Year span	# of test- takers start year	# of test- takers end year	Change in # of test- takers over time	% of test- takers in subgroup in end year	Year span	# of test- takers start year	# of test- takers end year	Change in # of test- takers over time	% of test- takers in subgroup in end year	Year span	# of test- takers start year	# of test- takers end year	Change in # of test- takers over time	% of test- takers in subgroup in end year
All tested	Reading	06-09	6,210	6,382	2.8%	100.0%	06-09	7,249	6,819	-5.9%	100.0%	08-09	7,240	7,208	-0.4%	100.0%
students	Math	06-09	6,274	6,394	1.9%	100.0%	06-09	7,262	6,813	-6.2%	100.0%	08-09	7,187	7,172	-0.2%	100.0%
White	Reading	06-09	5,890	5,812	-1.3%	91.1%	06-09	6,945	6,400	-7.8%	93.9%	08-09	6,865	6,864	0.0%	95.2%
Winte	Math	06-09	5,947	5,812	-2.3%	90.9%	06-09	6,956	6,392	-8.1%	93.8%	08-09	6,817	6,826	0.1%	95.2%
African	Reading	06-09	92	123	33.7%	1.9%	06-09	95	127	33.7%	1.9%	08-09	110	78	-29.1%	1.1%
American	Math	06-09	95	130	36.8%	2.0%	06-09	96	128	33.3%	1.9%	08-09	107	77	-28.0%	1.1%
Latina	Reading	07-09	71	217	205.6%	3.4%	07-09	89	78	-12.4%	1.1%	08-09	63	64	1.6%	0.9%
Latino	Math	07-09	72	218	202.8%	3.4%	07-09	90	77	-14.4%	1.1%	08-09	62	63	1.6%	0.9%
Asian	Reading	06-09	90	90	0.0%	1.4%	06-09	69	87	26.1%	1.3%	08-09	88	66	-25.0%	0.9%
ASIdH	Math	06-09	91	93	2.2%	1.5%	06-09	69	89	29.0%	1.3%	08-09	89	67	-24.7%	0.9%
Native	Reading	07-09	17	12	-29.4%	0.2%	06-09	32	16	-50.0%	0.2%	08-09	41	40	-2.4%	0.6%
American	Math	07-09	17	12	-29.4%	0.2%	06-09	32	16	-50.0%	0.2%	08-09	41	40	-2.4%	0.6%
Low-income	Reading	06-09	1,888	2,162	14.5%	33.9%	06-09	1,872	2,012	7.5%	29.5%	08-09	1,489	1,497	0.5%	20.8%
Low-income	Math	06-09	1,931	2,166	12.2%	33.9%	06-09	1,880	2,009	6.9%	29.5%	08-09	1,469	1,475	0.4%	20.6%
Students w/	Reading	06-09	479	725	51.4%	11.4%	06-09	706	955	35.3%	14.0%	08-09	849	890	4.8%	12.3%
disabilities	Math	06-09	519	727	40.1%	11.4%	06-09	720	949	31.8%	13.9%	08-09	827	864	4.5%	12.0%
English	Reading	07-09	140	150	7.1%	2.3%	07-09	119	112	-5.9%	1.6%	08-09	81	68	-16.0%	0.9%
language learners	Math	07-09	146	154	5.5%	2.4%	07-09	125	113	-9.6%	1.7%	08-09	81	68	-16.0%	0.9%
Female	Reading	06-09	3,033	3,091	1.9%	48.4%	06-09	3,588	3,343	-6.8%	49.0%	08-09	3,569	3,581	0.3%	49.7%
генае	Math	06-09	3,040	3,096	1.8%	48.4%	06-09	3,586	3,344	-6.7%	49.1%	08-09	3,542	3,574	0.9%	49.8%
Male	Reading	06-09	3,177	3,287	3.5%	51.5%	06-09	3,661	3,473	-5.1%	50.9%	08-09	3,671	3,622	-1.3%	50.2%
maic	Math	06-09	3,234	3,371	4.2%	52.7%	06-09	3,676	3,466	-5.7%	50.9%	08-09	3,645	3,593	-1.4%	50.1%

Table reads: In 2006, 5,890 students in the white subgroup took the state 4<sup>th</sup> grade reading test. By 2009, the number of white test-takers had fallen to 5,812 students, a decrease of 1.3%. In 2009, the white subgroup made up 91.1% of the 6,382 4<sup>th</sup> graders taking the reading test that year.

Note: **Bold** type indicates that the number of students tested in this subgroup at this grade level was fewer than 500 in 2009 or the most recent year with available data.

### **Key Terms**

Percentage proficient (and above) — The percentage of students in a group who score at or above the cut score for "proficient" performance on the state test used to determine progress under NCLB. The Act requires states to report student test performance in terms of at least three achievement levels: basic, proficient, and advanced. Adequate yearly progress determinations are based on the percentage of students scoring at the proficient level and above.

Percentage basic (and above) — The percentage of students in a group who score at or above the cut score for "basic" performance on the state test used to determine progress under NCLB.

*Percentage advanced* — The percentage of students in a group who reach or exceed the cut score for "advanced" performance on the state test used to determine progress under NCLB.

*Moderate-to-large gain* — For the percentage basic, proficient, or advanced, an average gain of 1 or more percentage points per year. For effect size, an average gain of 0.02 or greater per year.

Slight gain — For the percentage basic, proficient, or advanced, an average gain of less than 1 percentage point per year. For effect size, an average gain of less than 0.02 per year.

*Moderate-to-large decline* — For the percentage basic, proficient, or advanced, an average decline of 1 or more percentage points per year. For effect size, an average decline of 0.02 or greater per year.

Slight decline — For the percentage basic, proficient, or advanced, an average decline of less than 1 percentage point per year. For effect size, an average decline of less than 0.02 per year.

*Effect size* — A statistical tool that conveys the amount of difference between test results using a common unit of measurement which does not depend on the scoring scale for a particular test.

Accumulated annual effect size — The cumulative gain in effect size over a range of years.

*Mean scale score* — The arithmetical average of a group of test scores, expressed on a common scale for a particular state's test. The mean is calculated by adding the scores and dividing the sum by the number of scores.

Standard deviation — A measure of how much test scores tend to deviate from the mean—in other words, how spread out or bunched together test scores are. If students' scores are bunched together, with many scores close to the mean, then the standard deviation will be small. If scores are spread out, with many students scoring at the high or low end of the scale, then the standard deviation will be large.

## **Cautions and Explanations**

*Different labels for achievement levels* — For consistency, all of the state profiles developed for this report use a common set of labels (basic, proficient, and advanced) for the main achievement levels required by NCLB. In practice, however, some states may use different labels, such as "meets standard" instead of proficient, and some states have established additional achievement levels beyond those required by NCLB.

*Different names for subgroups* — For the sake of consistency and ease of data tabulation, all of the state profiles developed for this report use a common set of names for the major student subgroups. In practice, however, states use various names for subgroups that may differ from those used here (such as using "Hispanic" instead of "Latino," or "special education students" instead of "students with disabilities"). Moreover, a few states separately track the performance of subgroups not included in the analyses for this report.

Special caution for students with disabilities and English language learners — Trends for students with disabilities and English language learners should be interpreted with caution because changes in federal guidance and state accountability plans may have altered which students in these subgroups are tested for accountability purposes, how they are tested, and when their test scores are counted as proficient under NCLB. These factors could affect the year-to-year comparability of test results.

Inclusion of former English language learners — In many states, the subgroup of English language learners (also known as limited English proficient students) includes students who were formerly English language learners but who have achieved English language proficiency or fluency in the last two years. Federal NCLB regulations permit states to include these formerly ELL students (sometimes referred to as "redesignated fluent English proficient" students) in the ELL subgroup for up to two years for purposes of NCLB accountability.

Limitations of percentage proficient measure — The percentage proficient, the main gauge of student performance under NCLB, can be easily understood and gives a snapshot of how many students have met their state's performance expectations. But it also has several limitations as a measure of student achievement. Users of percentage proficient data should keep in mind these limitations, particularly the following:

- \* "Proficient" means different things across different states. States vary widely in curriculum, learning expectations, and tests, and state tests differ considerably in their difficulty and cut scores for proficient performance.
- \* Although this study has taken steps to avoid comparing test data where there have been "breaks" in comparability resulting from new tests, changes in content standards, revised cut scores, or other major changes in testing programs, the year-to-year comparability of test results in the same state may still be affected by less obvious policy and demographic changes.
- \* Changes in student performance may occur that are not reflected in percentage proficient data, such as an increase in the number of students reaching performance levels below and above proficient (such as the basic or advanced levels).
- \* The size of the achievement gaps between various subgroups depends in part on where a state sets its cut score for proficiency. For example, if a proficiency cut score is set so high that almost nobody reaches it or so low that almost everyone reaches it, there will be little apparent achievement gap. By contrast, if the cut score is closer to the mean test score, the gaps between subgroups will be more apparent.

*Difficulty of attributing causes* — Although the tables in this profile show trends in test scores since the enactment of NCLB, one cannot assume that these trends have occurred *because* of NCLB. It is always difficult to determine a cause-and-effect relationship between test score trends and any specific education policy or program due to the many federal, state, and local reforms undertaken in recent years and due to the lack of an appropriate "control" group of students not affected by NCLB.