



February 9, 2011

## New England Common Assessment Program (NECAP) Fall 2010 Vermont Results



Fall 2010 NECAP Public Release

**Part One:**  
**What is NECAP? What does it  
measure? How does it  
measure it?**





## What is NECAP?

- ✓ A collaborative effort of the Maine, New Hampshire, Rhode Island and Vermont Departments of Education
- ✓ Administered each year in October
- ✓ Reading and Mathematics are assessed in grades 3 through 8 and Grade 11
- ✓ Writing is assessed in grades 5, 8 and 11
- ✓ All test questions are aligned with VT standards and grade expectations
- ✓ Uses a combination of multiple choice, short answer and constructed response questions
- ✓ Student results are reported at 4 achievement levels: Proficient with Distinction, Proficient, Partially Proficient and Substantially Below Proficient
- ✓ 44,659 Vermont students were tested in 2010

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## What is NECAP?

**NECAP is fully aligned with Vermont Standards and Grade Expectations:**

**DSP 2.1** Interprets a given representation (pictographs with one-to-one correspondence, line plots, tally charts, or tables) to answer questions related to the data, or to analyze the data to formulate conclusions.

(IMPORTANT: Analyzes data consistent with concepts and skills in *M(DSP)-2-2.*)

- 1 This pictograph shows the animals on Ms. Howe's farm.

Animals on Ms. Howe's Farm

Cows	x x x x x
Horses	x x
Goats	x x x
Pigs	x x x x

**Key**

x represents 1 animal

How many more cows than goats are on Ms. Howe's farm?

- A. 1
- B. 2
- C. 3
- D. 5

Grade 3 Math Item

One of the things students should know by the end of second grade

One of the ways we try to find out if they know it

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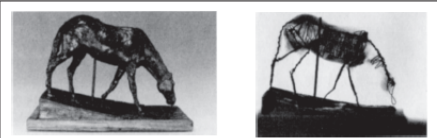
## What is NECAP?

### NECAP uses a variety of item types:

Read this article about a surprising use of X-rays. Then answer the questions that follow.

#### X-ray Detectives Carla Killough McClafferty

1 Some wonderfully creative uses of X-rays have been in the world of art. X-rays themselves have influenced artists. According to an article in *Art Journal*, a group of artists in the early twentieth century known as cubists may have been partly inspired by the X-ray images they saw. Their abstract painting sometimes showed the interior of solid objects in a way similar to the way X-rays revealed hidden structures. Some of these artists used light and shadow to create skeletonlike shapes that resemble X-rays.



LEFT: One of the earliest horse sculptures by Edgar Degas, *Horse at Trough*, from the early 1860s. The figure has been formed from brown wax with red highlights and rests on a wooden base. Degas's attention to detail can be especially seen in the horse's mane, mouth, and nostrils.

RIGHT: An X-ray of the same sculpture shows that this attention to detail began on the inside. Degas built an intricate, almost lifelike, metal skeleton by wrapping and twisting wire before he began sculpting with wax. You can also see the nails he used to build the wooden base. Without the benefit of X-rays, we'd never be able to see the inner support for this work of art without destroying it.

Multiple Choice:  
Students select their answer from 4 options

- 3 In the first paragraph, which information suggests that X-rays may have influenced artists?
- A. They used reverse images.
  - B. They showed inside views of subjects.
  - C. They used black and white paint.
  - D. They showed outline images of subjects.

Grade 7 Reading Item

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## What is NECAP?

### NECAP uses a variety of item types:

- 10 This table shows the numbers of baseball cards seven students collected.

Student	Number of Baseball Cards
Harriet	62
John	54
Kate	56
Raul	50
Masako	52
Charlie	53
Dewayne	58

Constructed Response:  
Students solve the problem and explain their reasoning

What is the median number of baseball cards the students collected? Show your work or explain how you know.

Grade 5 Math Item

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## What is NECAP?

### NECAP uses a variety of item types:

Writing

Procedure

- 1 Your group is holding a car wash to raise money. You are responsible for developing a procedure to explain how to do a thorough job cleaning vehicles and pleasing your customers. Write the procedure. You may include text features (diagrams, bullets/numbers, etc.) to help the reader.

**Before writing, consider**

- what the reader needs to know about this procedure
- the steps in this procedure
- potential problems with this procedure

Grade 11 Writing Item

Extended Response:  
Students write an  
essay – expressive,  
informational or  
response to text

**A complete response to the prompt will include**

- a clear purpose/focus
- coherent organization
- details/elaboration
- well-chosen language and a variety of sentence structures
- control of conventions

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## What is NECAP?

### Scores are reported at 4 achievement levels:

Level 4: Proficient with Distinction	Demonstrates the prerequisite knowledge and skills needed to participate and excel in instructional activities aligned with the grade expectations at the current grade level. Errors are minor and do not reflect gaps in prerequisite skills and knowledge.
Level 3: Proficient	Demonstrates minor gaps in the prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the grade expectations at the current grade level. Any gaps in prerequisite skills and knowledge can be addressed in the course of typical classroom instruction.
Level 2: Partially Proficient	Demonstrates gaps in the prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the grade expectations at the current grade level. Additional instructional support may be necessary for these students to meet grade level expectations.
Level 1: Substantially Below Proficient	Demonstrates extensive and significant gaps in the prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the grade expectations at the current grade level. Additional instructional is necessary for these students to meet grade level expectations.

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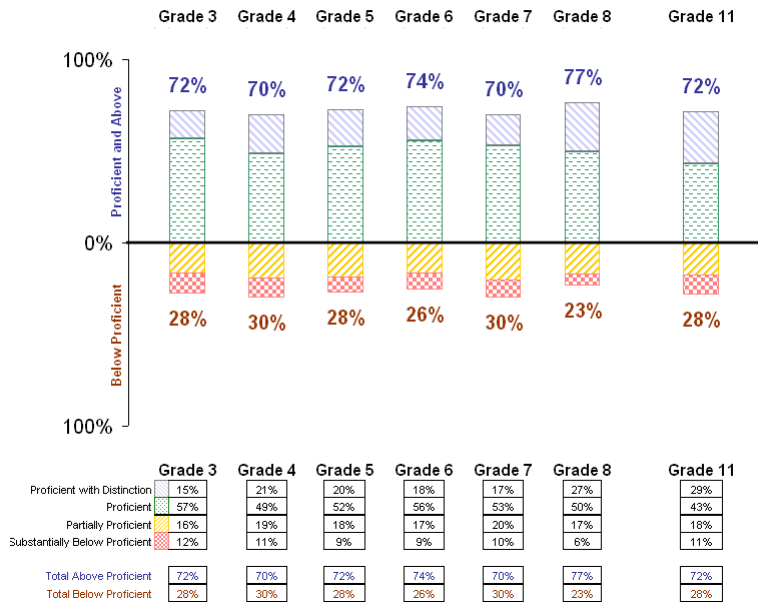


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Part Two:  
Fall 2010 Statewide Results

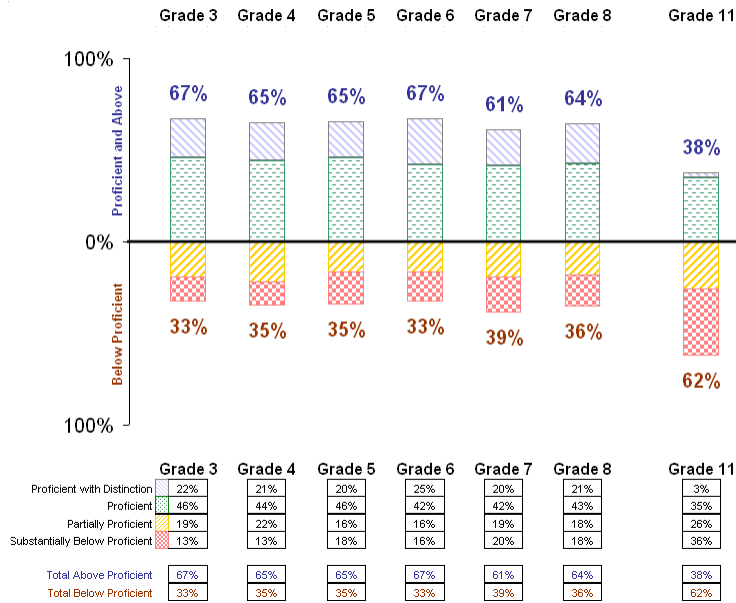


2010 NECAP Reading Achievement for Grades 3 – 8 and 11  
What percentage of students at each grade level met reading grade expectations?



## 2010 NECAP Mathematics Achievement for Grades 3 – 8 and 11

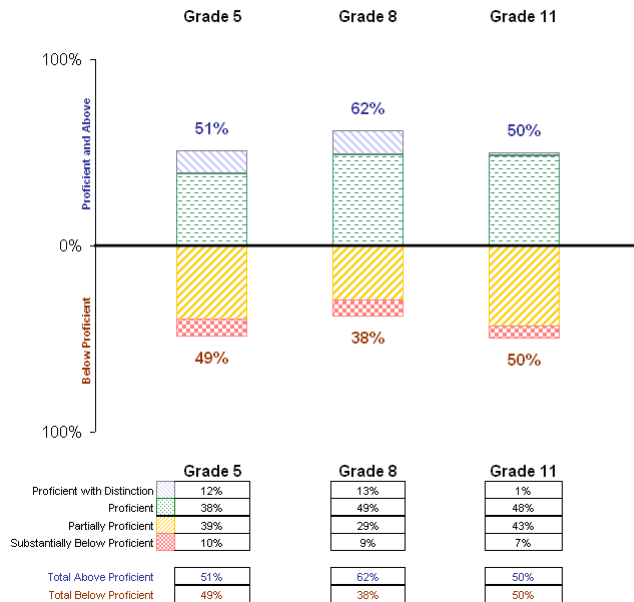
*What percentage of students at each grade level met math grade expectations?*



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## 2010 NECAP Writing Achievement for Grades 5, 8 and 11

*What percentage of students at each grade level met writing grade expectations?*



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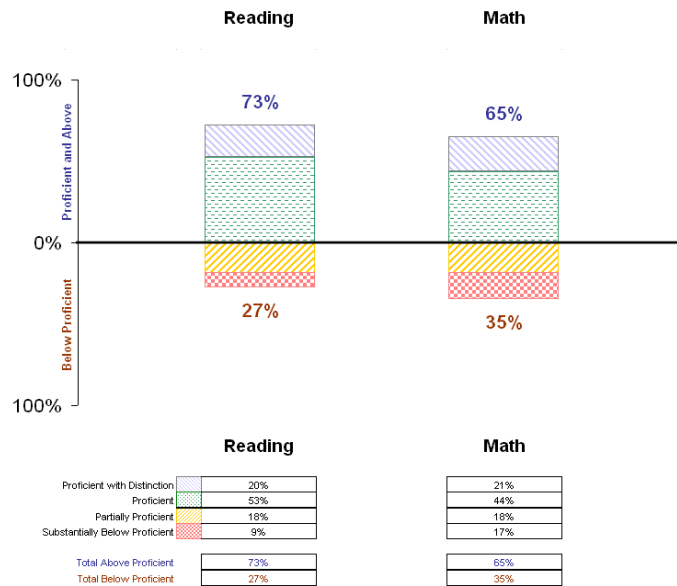


Fall 2010 NECAP Public Release

Part Three:  
**Statewide Analysis for Grades 3-8**

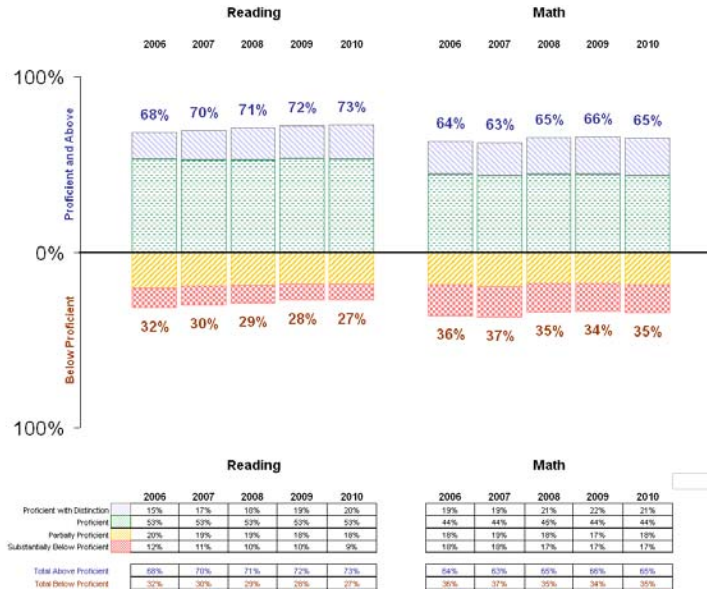


**2010 NECAP Achievement for Grades 3 - 8**  
*How did elementary/middle school students do in reading and math?*



## Grades 3 - 8 NECAP Achievement Over the Past 5 Years

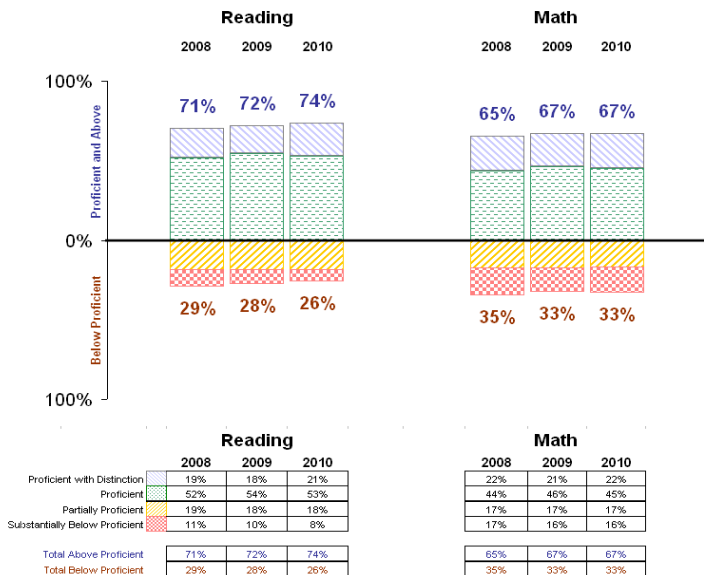
*How do 2010 scores compare with previous years? Are scores improving over time?*



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## Individual Student Growth in Grades 3 – 8 Over 3 Years of Testing

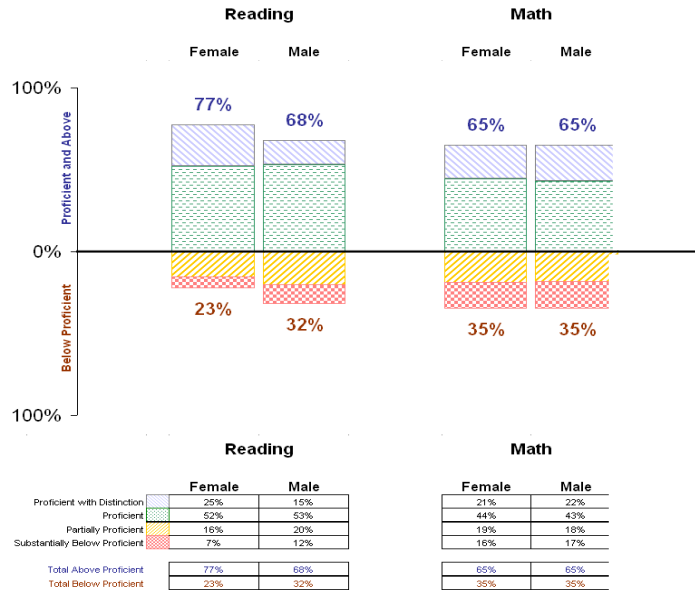
*Are students who spent the last 3 years in the same school improving over time?*



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### 2010 NECAP Achievement for Grades 3 - 8

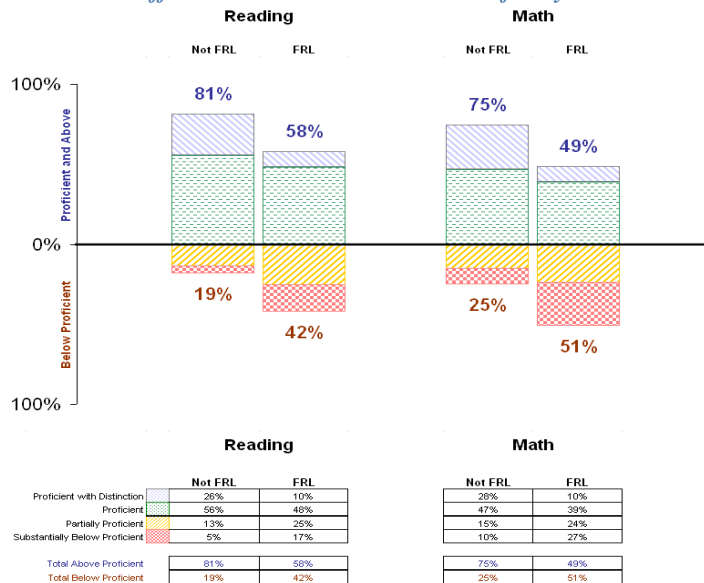
*Are there differences in achievement related to gender?*



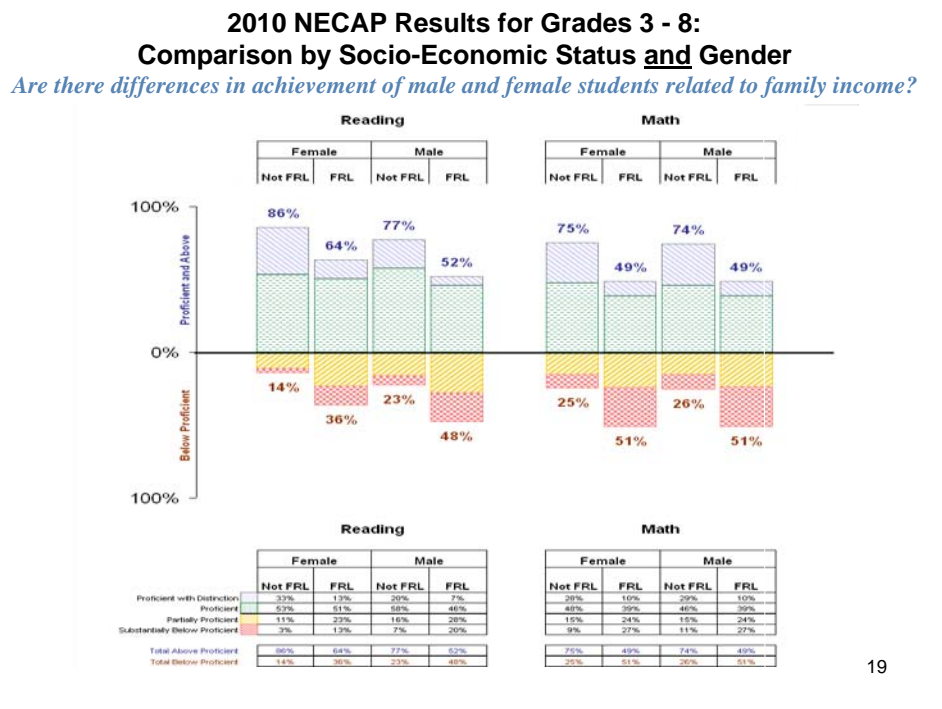
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### 2010 NECAP Achievement for Grades 3 - 8

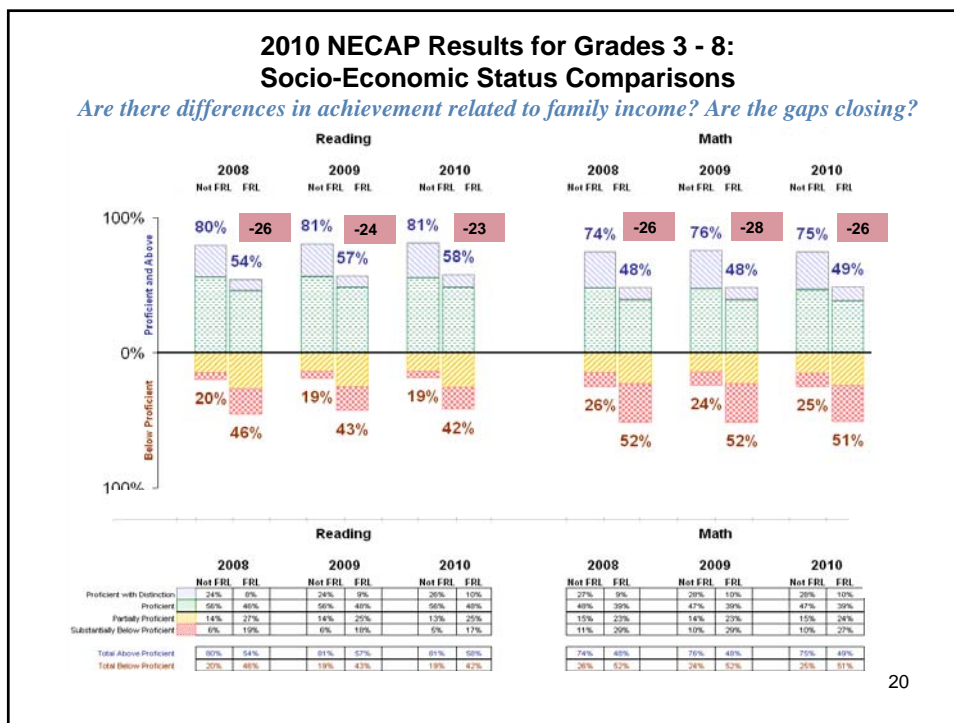
*Are there differences in achievement related to family income?*



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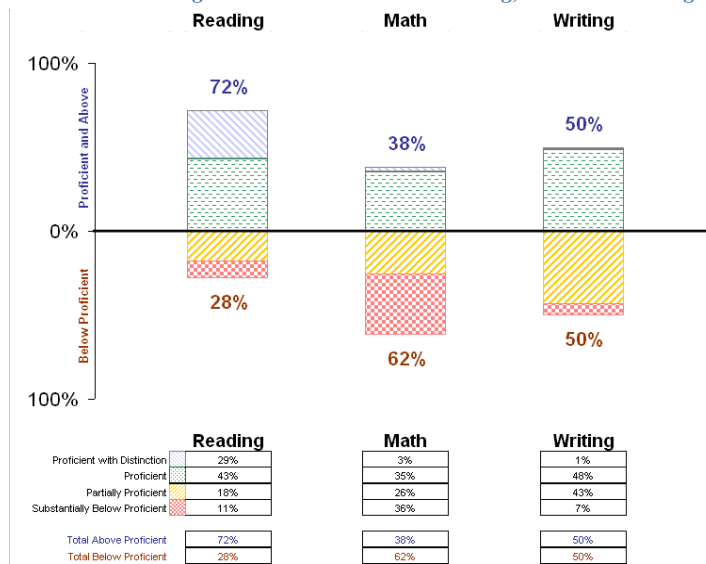


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Part Four:  
**Statewide Analysis for Grade 11**



**2010 NECAP Achievement for Grade 11**  
*How did high school students do in reading, math and writing?*



### Grade 11 NECAP Achievement Over the Past 3 Years

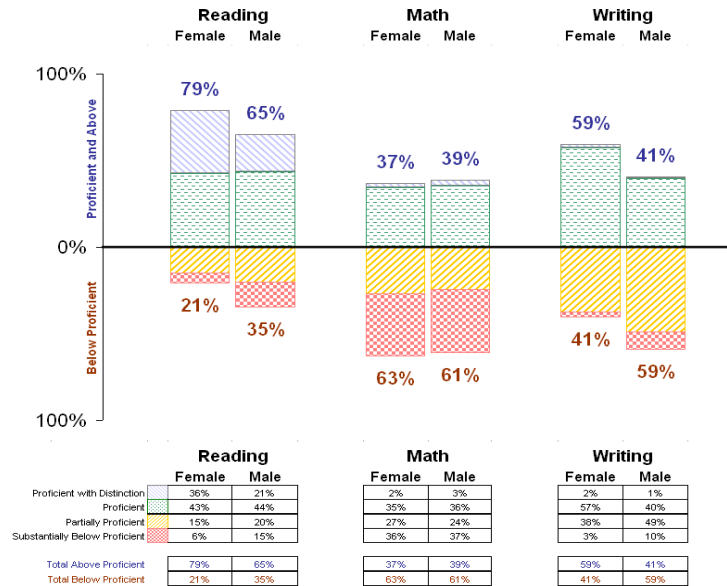
*How do 2010 scores compare with previous years? Are scores improving over time?*



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### 2010 NECAP Achievement for Grade 11

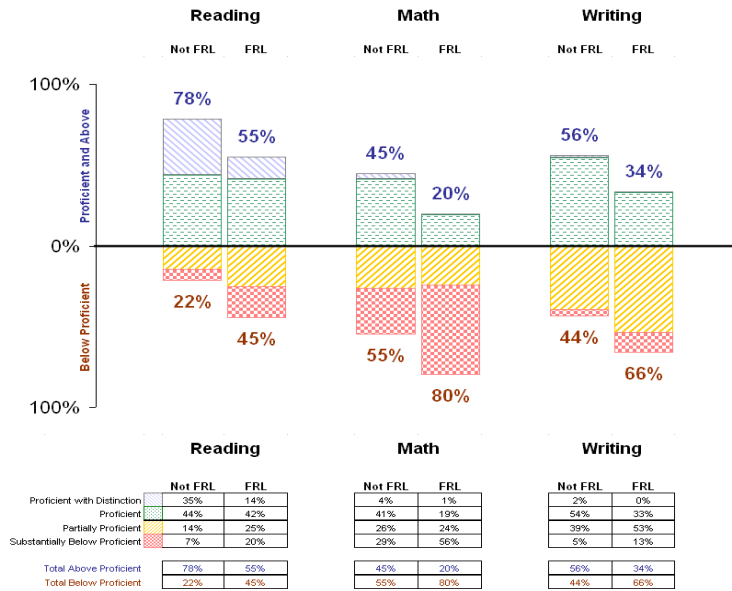
*Are there differences in achievement related to gender?*



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## 2010 NECAP Achievement for Grade 11

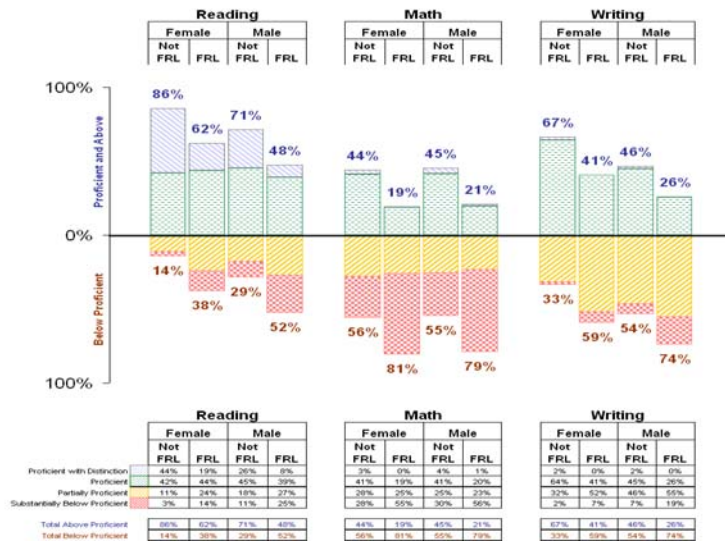
*Are there differences in achievement related to family income?*



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## 2010 NECAP Results for Grade 11: Comparison by Socio-Economic Status and Gender

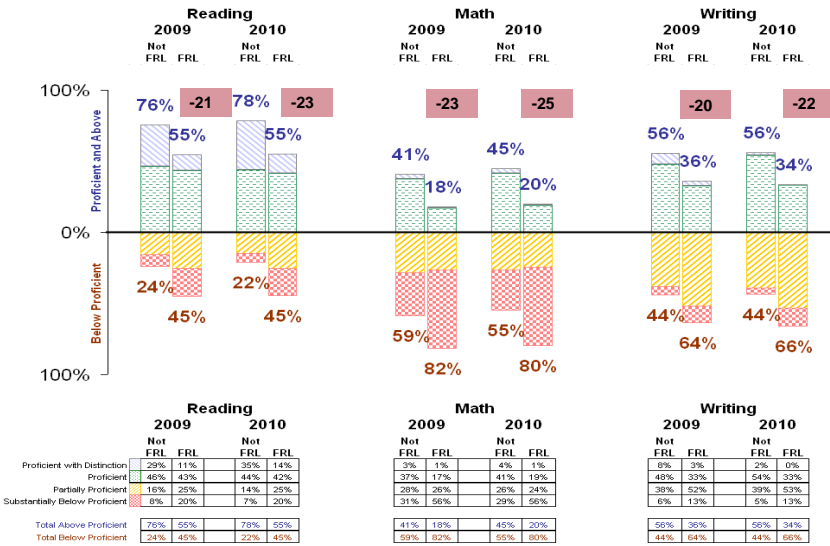
*Are there differences in achievement of male and female students related to family income?*



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## 2010 NECAP Results for Grade 11: Socio-Economic Status Comparisons

*Are there differences in achievement related to family income? Are the gaps closing?*



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### Part Five: Closing the Poverty Gap: 14 Vermont Schools with High Achievement for ALL Students



## 14 Effective Schools Closing the Poverty Gap

- ✓ Addison Central School
- ✓ Folsom Education & Community Center
- ✓ Glover Community School
- ✓ Montgomery Elementary School
- ✓ Newton School
- ✓ Samuel Morey Elementary School
- ✓ Warren Elementary School
- ✓ Brewster Pierce School
- ✓ Franklin Elementary School
- ✓ Hartland Elementary School
- ✓ Mt. Holly School
- ✓ Poultney Elementary School
- ✓ Townshend Village School
- ✓ White River School

### Selection Criteria:

- ✓ Based on students tested in 2010 who attended their school for at least 3 consecutive years
- ✓ At least 25% of students enrolled in Free/Reduced Lunches Program (FRL)
- ✓ Average of proficient **NECAP** reading and math scores for all students = 80% or more (10 percentage points higher than state average)
- ✓ Average of proficient **NECAP** reading and math scores for FRL students = 70% or more (10 percentage points higher than state average)

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Profile of high achievement...



### Montgomery Elementary School



Of the 14 Schools:

- ✓ Highest Percent of Students in Cohort Enrolled in FRL program
- ✓ Highest Percent Proficient and Above for Entire Cohort
- ✓ Highest Percent Proficient and Above for FRL students in Cohort



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Profile of high achievement...



Montgomery Elementary School

- ✓ Located in Montgomery Center, Franklin County, Franklin Northeast Supervisory Union
- ✓ 127 students enrolled in grades K-8
- ✓ 54% currently enrolled in Free/Reduced Lunch (FRL)
- ✓ Growth in Achievement for ALL Students

	Growth in Percent Proficient and Above					
	All Students			FRL Students		
	'07-'08	'08-'09	'09-'10	'07-'08	'08-'09	'09-'10
Reading	84%	87%	90%	77%	79%	83%
Mathematics	83%	90%	90%	73%	85%	83%

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Profile of high achievement...



Montgomery Elementary School

- ✓ 78 Students in the three-year cohort
- ✓ Nearly 63% of cohort enrolled in FRL
- ✓ High Achievement for ALL students in the cohort

	Percentage of Students in Cohort Proficient or Higher			
	Reading		Mathematics	
	Montgomery	Vermont	Montgomery	Vermont
All Students	93%	75%	95%	67%
FRL Students	86%	62%	92%	53%

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Profile of high achievement...



## Montgomery Elementary School

The Roots of Montgomery's Success: Comments from Principal Beth O'Brien:

*"Our scores are the result of many years of hard work by every adult and child in the building."*

- ✓ Development of excellence in teaching
- ✓ Alignment of data and curriculum to drive instruction
- ✓ Encouraging a sense of accountability and motivation

*"In my opinion (the Roots of Success) study is a blueprint for building a successful school."*

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## For Additional Information...

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**Roots of Success Study and Materials**

**Web Address:** <http://rootsofsuccess.wordpress.com/>

