

## 2012 CMT, CAPT RESULTS SHOW SOME INCREASES, WHILE GAPS IN ACHIEVEMENT PERSIST

The Connecticut State Department of Education announced today that student performance on the Connecticut Mastery Test (CMT) increased in several grades and content areas from last year, continuing a trend of incremental improvement since the CMT baseline year of 2006. The most consistent and significant increases in student performance occurred in reading and writing; student performance in math and science increased in the early grades but declined in later grades.

The results of the 2012 Connecticut Academic Performance Test (CAPT) were mixed. While student performance increased in all content areas when compared to the CAPT baseline year of 2007, it decreased in some areas when compared to last year. As compared to 2011, performance increased slightly in writing, remained relatively constant in science and reading, and decreased in mathematics.

Different metrics for measuring Connecticut's income-based achievement gap (using eligibility for free or reduced price meals as a proxy for poverty) paint a mixed picture of whether the gaps are narrowing. Examining changes in the percentage of students who perform at or above the Proficient and Goal levels shows that in nearly every grade level and content area, the gaps between low- and higher-income students have narrowed since 2006, further closing in the most recent year. Vertical scale score data, which measures cohort growth over time, shows the gap narrowing modestly in some content areas, but also reveals cases in which the gap is widening. Both metrics clearly reveal that the gap in achievement between low- and higher-income students persists, with more than twice the percentage of higher-income students performing at or above the Goal level than lower-income students in many grade levels and content areas.

Stefan Pryor, Connecticut Commissioner of Education said: "We're pleased to see that there are signs of progress in our schools. That said - while schools are moving more students into Proficient- and Goal-level performance, significant gaps in achievement continue between economically disadvantaged students and their peers. So there is reason for optimism regarding our system's ability to advance, as well as cause for continuing concern. We need to work together to implement the reforms and initiatives we've recently launched in order to build on areas of progress and remedy the persistent problems in our schools."

Public Act 12-116 identifies Connecticut's thirty lowest performing districts as Alliance Districts and will provide them with additional funding conditional upon clear plans for reform. While 2012 data shows that Alliance Districts continue to perform far below other districts in all content areas and grade levels, many of these districts have made significant progress when compared to data from the previous year.

Complete state-, district- and school-level CMT and CAPT results are now available on the Online Reports website (www.ctreports.com). Parents will receive notification of individual student performance results for their children in September.

Both the CMT and the CAPT have five student performance levels for each content area tested: Below Basic, Basic, Proficient, Goal, and Advanced. The CMT assesses approximately 250,000 students on their application of skills and knowledge in the academic content areas of mathematics, reading, and writing in Grades 3 through 8, and science in Grades 5 and 8. This year marks the seventh administration of the CMT. The March 2006 administration of the CMT serves as a baseline year for examining changes in student performance because it was the first year that the Fourth Generation CMT was administered. The CMT also has vertical scales in mathematics and reading that enable valid measures of cohort growth in tested students' performance from 2006 to 2012.

The CAPT assesses over 40,000 students on their integration and application of skills in the academic content areas of mathematics, reading across the disciplines, writing across the disciplines, and science. The results from the March 2007 CAPT provide a baseline for examining student performance statewide over six years of CAPT administrations.

In May, the United States Department of Education approved Connecticut's waiver from certain provisions of No Child Left Behind (NCLB). Connecticut's waiver introduces new metrics for measuring school and subgroup performance that improve upon NCLB in a number of ways. First, the new accountability system captures progress across all bands of performance. Under NCLB, the percentage of students who reached Proficiency was used to determine whether schools and districts were making Adequate Yearly Progress (AYP). This metric only captured progress across the Proficient threshold on the CMT and CAPT. The metric did not capture progress made by students who are the furthest behind (performing at the Below Basic level and advancing to a level shy of Proficiency, within the Basic range) or students who had already reached Proficiency and increased their performance to the Goal and Advanced levels.

The new accountability system introduces metrics that capture the progress of students across all performance levels. This change will better enable schools to advance the growth of all of their students. Schools are encouraged to lift students who are furthest behind up to the Proficient level, students who are Proficient to the higher Goal standard of college and career readiness, and the highest performing students to the Advanced level. Besides counting performance across all bands, Connecticut's new accountability metrics will also incorporate achievement in science and writing to build a more complete learning profile. Under NCLB, schools were held accountable only for student performance in math and reading.

This year's CMT and CAPT reports, therefore, incorporate scale score growth analysis and focus on performance across all bands. Future reports will more thoroughly draw upon this new methodology.

## EXPLANATORY INFORMATION AND ANALYSIS

## Student Performance Across All Performance Bands

## CMT

## CONNECTICUT MASTERY TEST (CMT) GRADE 5

Percentage of Students Scoring Below Basic, Basic, Proficient, Goal, and Advanced By Content Area and Year


| Below Basic | Basic | Proficient | Goal | Advanced |
| :---: | :---: | :---: | :---: | :---: |
|  | age of <br> age of <br> was no | ts Performin <br> ts Performi <br> d on the | Abov <br> Abov <br> 06. | oal Level oficient Le |

## CONNECTICUT MASTERY TEST (CMT) GRADE 8

Percentage of Students Scoring Below Basic, Basic, Proficient, Goal, and Advanced By Content Area and Year



Connecticut students demonstrated improvement on the CMT in many grade levels and content areas by decreasing the percentage of students performing in the lower bands on the CMT (Below Basic, Basic, and Proficient) and increasing the percentage in the upper bands (Goal and Advanced). This upward trend is present when looking at CMT data from 2006, 2011, and 2012. When looking at the performance of students over time, it is important to note that the CMT Modified Assessment System (CMT MAS) in reading and mathematics was piloted in 2009 and fully implemented in 2010. Therefore, when comparing scores after 2008, one should acknowledge that students selected for the CMT MAS in reading and mathematics are not included among students taking the standard CMT in those subject areas.

## Mathematics

Overall gains are apparent in most grades when 2012 data are compared with the baseline year of 2006; the percentages of students performing at or above Proficient and at or above Goal have increased. The percentage of students scoring within the Below Basic, Basic, and Proficient levels decreased, which contributed to an increase in the percentage of students at the Advanced level. However, comparing 2011 to 2012 data yields mixed results. In mathematics, Grades 5, 6 , and 7 have seen decreases in the percentage of students performing at or above Proficient and at or above Goal. Grades 3, 4, and 8 have increased the percentage of students scoring at those levels.

## Reading

Compared to the baseline year of 2006, there has been an increase in the percentages of students scoring at or above Proficient and at or above Goal for all grade levels. The percentage of students scoring at Below Basic decreased, and the percentage of students scoring at Advanced increased in all grades. From 2011 to 2012, Grades 3, 4, 5, 7, and 8 increased the percentage of students scoring at or above Proficient or at or above Goal. Grade 6 saw a decrease in the percentage of students scoring at both of these performance levels. When compared to 2011, the current year results show progress in the upper- and lower-most performance bands: the percentage of students scoring at Below Basic decreased in four of the six tested grades, while the percentage of students performing at Advanced increased in five of the six grades.

## Writing

Compared to the baseline year, most grades have shown improvement. Data showed a decline in the percentage of students in all grades at the Below Basic level when compared to 2006, while the percentage of students at the Advanced level increased in all grades. Current year scores show progress in some grades when compared to the 2011 results. The percentages of students scoring at or above Proficient or at or above Goal increased in Grades 3, 5, 7, and 8 between 2011 and 2012. Grade 6 showed mixed results, with an increase in the percentage of students scoring at or above Goal, and a decrease in the percentage of students scoring at or above Proficient. Grade 4 showed a decrease in the percentages of students scoring at or above Proficient and at or above Goal.

## Science

The 2012 results show decreases in the percentage of students scoring within Below Basic, Basic, and Proficient in all tested grades when compared to the CMT science baseline year of 2008. Increased percentages of students in all grades scoring at or above Goal and Advanced were also observed. Current year scores mostly show progress when compared to the 2011 results. For Grade 5, the percentage of students scoring at Proficient stayed constant, while the percentage of students scoring at or above Goal increased. The percentages of Grade 8 students scoring at or above Proficient increased, while the percentage of students scoring at or above Goal decreased from 2011 to 2012. The percentage of students performing at Below Basic decreased in both tested grades from 2011 to 2012 as well.

Table 1: CMT Performance, by Grade, Percent At or Above Goal and Percent At or Above Proficient in Years 2006, 2011 and 2012

|  | Mathematics |  | Reading |  | Writing |  | Science |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Year | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal |
| 3 | 2006 | 78.3 | 56.3 | 69.2 | 54.4 | 81.7 | 61.1 | NA | NA |
| 3 | 2011 | 84.3 | 63.2 | 73.9 | 58.3 | 81.1 | 61.1 | NA | NA |
| $\mathbf{3}$ | $\mathbf{2 0 1 2}$ | $\mathbf{8 5 . 8}$ | $\mathbf{6 6 . 8}$ | $\mathbf{7 4 . 5}$ | $\mathbf{5 9 . 2}$ | $\mathbf{8 3 . 2}$ | $\mathbf{6 2 . 7}$ | NA | NA |
| 4 | 2006 | 80.3 | 58.8 | 71.8 | 57.8 | 84.2 | 62.8 | NA | NA |
| 4 | 2011 | 85.1 | 67.2 | 74.7 | 62.5 | 85.4 | 65.5 | NA | NA |
| $\mathbf{4}$ | $\mathbf{2 0 1 2}$ | $\mathbf{8 5 . 8}$ | $\mathbf{6 8 . 2}$ | $\mathbf{7 8 . 3}$ | $\mathbf{6 4 . 1}$ | $\mathbf{8 3 . 7}$ | $\mathbf{6 5 . 3}$ | NA | NA |
| 5 | 2006 | 80.8 | 60.7 | 72.8 | 60.9 | 85.3 | 65.0 | NA | NA |
| 5 | 2011 | 87.6 | 72.7 | 75.1 | 61.4 | 88.0 | 66.8 | 82.4 | 60.2 |
| $\mathbf{5}$ | $\mathbf{2 0 1 2}$ | $\mathbf{8 5 . 7}$ | $\mathbf{7 1 . 8}$ | $\mathbf{7 9 . 7}$ | $\mathbf{6 7 . 7}$ | $\mathbf{8 8 . 5}$ | $\mathbf{6 8 . 1}$ | $\mathbf{8 2 . 4}$ | 64.1 |
| 6 | 2006 | 79.8 | 58.6 | 75.4 | 63.6 | 82.7 | 62.2 | NA | NA |
| 6 | 2011 | 88.5 | 71.6 | 86.5 | 76.0 | 86.1 | 65.3 | NA | NA |
| $\mathbf{6}$ | $\mathbf{2 0 1 2}$ | $\mathbf{8 7 . 2}$ | $\mathbf{6 9 . 5}$ | $\mathbf{8 4 . 8}$ | $\mathbf{7 4 . 2}$ | $\mathbf{8 4 . 9}$ | $\mathbf{6 7 . 5}$ | NA | NA |
| 7 | 2006 | 77.8 | 57.0 | 76.4 | 66.7 | 80.9 | 60.0 | NA | NA |
| 7 | 2011 | 87.2 | 68.7 | 85.7 | 77.8 | 79.8 | 58.9 | NA | NA |
| $\mathbf{7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{8 6 . 7}$ | $\mathbf{6 8 . 3}$ | $\mathbf{8 7 . 4}$ | $\mathbf{7 9 . 9}$ | $\mathbf{8 3 . 9}$ | $\mathbf{6 5 . 6}$ | NA | NA |
| 8 | 2006 | 78.9 | 58.3 | 76.6 | 66.7 | 81.9 | 62.4 | NA | NA |
| 8 | 2011 | 86.0 | 66.8 | 83.4 | 74.7 | 81.6 | 64.8 | 75.9 | 63.3 |
| $\mathbf{8}$ | $\mathbf{2 0 1 2}$ | $\mathbf{8 7 . 1}$ | $\mathbf{6 7 . 4}$ | $\mathbf{8 6 . 2}$ | $\mathbf{7 6 . 8}$ | $\mathbf{8 6 . 2}$ | $\mathbf{6 8 . 4}$ | $\mathbf{7 7 . 1}$ | $\mathbf{6 2 . 1}$ |

## Vertical Scale Score Reporting

The CMT vertical scales are designed to measure change or growth in student achievement across grades (i.e., from Grade 3 to Grade 4, from Grade 4 to Grade 5, etc.) on tests that have different characteristics and items, but have similar content. Vertical scales have been developed in the content areas of mathematics and reading. The vertical scales were constructed so that each score represents the same theoretical achievement level, whether derived from a Grade 3, Grade 4, Grade 5, Grade 6, Grade 7 or Grade 8 CMT scale score. Each grade-level CMT scale score (range 100-400) in mathematics or reading corresponds to a specific value on a common mathematics or reading vertical scale score (range 200-700). Thus, students in different grades, taking different tests for the same content area, can have the same vertical scale score representing the same level of achievement defined by the vertical scale.

Table 2: Grade 3-5 CMT Growth by Cohort

| Cohort Years | Cohort Grade <br> Levels | Mathematics |  | Reading |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Growth | Average Vertical <br> Scale Score | Growth |  |
| Cohort 2006 | $\mathbf{3}$ | 450 |  | 423 |  |
| $\mathbf{2 0 0 7}$ | $\mathbf{4}$ | 491 | 41 | 451 | 28 |
| $\mathbf{2 0 0 8}$ | $\mathbf{5}$ | 522 | 31 | 476 | 24 |
| Cohort 2007 | $\mathbf{3}$ | 452 |  | 423 |  |
| $\mathbf{2 0 0 8}$ | $\mathbf{4}$ | 491 | 39 | 451 | 28 |
| $\mathbf{2 0 0 9}$ | $\mathbf{5}$ | 526 | 35 | 481 | 30 |
| Cohort 2008 | $\mathbf{3}$ | 452 |  | 423 |  |
| $\mathbf{2 0 0 9}$ | $\mathbf{4}$ | 496 | 44 | 458 | 33 |
| $\mathbf{2 0 1 0}$ | $\mathbf{5}$ | 530 | 34 | 480 | 22 |
| Cohort 2009 | $\mathbf{3}$ | 455 |  | 427 |  |
| $\mathbf{2 0 1 0}$ | $\mathbf{4}$ | 499 | 44 | 456 | 29 |
| $\mathbf{2 0 1 1}$ | $\mathbf{5}$ | 531 | 32 | 479 | 23 |
| Cohort 2010 | $\mathbf{3}$ | 456 |  | 428 |  |
| $\mathbf{2 0 1 1}$ | $\mathbf{4}$ | 499 | 43 | 459 | 31 |
| $\mathbf{2 0 1 2}$ | $\mathbf{5}$ | 529 | 30 | 485 | 26 |

Table 2 compares growth in student performance from Grades 3 through 5, in mathematics and reading, for five cohorts of matched students who started testing in Grade 3 in 2006 through 2010. The cohort of Grade 3 students that started in 2010 was tested in Grade 5 in 2012. The information in the table can be interpreted in the following manner for the Grade 3 cohort that began in 2010:

- The average mathematics vertical scale score for the 2010 Grade 3 cohort of students was 456 . On average, this is higher than the average score for each of the previous four cohorts.
- When this cohort was tested as Grade 4 students in 2011, the average mathematics vertical scale score was 499 , the same score as the previous Grade 4 and a higher score than the three cohorts prior to that one. The difference of 43 scale points represents the cohort growth in mathematics between Grade 3 and Grade 4.
- When the same cohort was tested in mathematics in 2012, the average vertical scale score was 529 . The difference of 30 scale points represents the average growth in the students' performance between Grades 4 and 5.

Similar comparisons can be made about the growth of students in Grades 3 through 5 in reading.
Table 3 compares the growth in student performance from Grades 6 through 8 in mathematics and reading for five cohorts of matched students who were tested in Grade 6 in 2006 through 2010, and were tested in Grade 8 in 2008 through 2012.

Table 3: Grade 6-8 CMT Growth by Cohort

| Cohort Years | Cohort Grade <br> Level | Mathematics |  | Reading |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Growth | Average Vertical <br> Scale Score | Growth |  |
| Cohort 2006 | $\mathbf{6}$ | 532 |  | 490 |  |
| $\mathbf{2 0 0 7}$ | $\mathbf{7}$ | 554 | 22 | 506 | 16 |
| $\mathbf{2 0 0 8}$ | $\mathbf{8}$ | 570 | 16 | 516 | 10 |
| Cohort 2007 | $\mathbf{6}$ | 540 |  | 491 |  |
| $\mathbf{2 0 0 8}$ | $\mathbf{7}$ | 559 | 19 | 513 | 22 |
| $\mathbf{2 0 0 9}$ | $\mathbf{8}$ | 575 | 16 | 520 | 7 |
| Cohort 2008 | $\mathbf{6}$ | 543 |  | 496 |  |
| $\mathbf{2 0 0 9}$ | $\mathbf{7}$ | 563 | 20 | 518 | 22 |
| $\mathbf{2 0 1 0}$ | $\mathbf{8}$ | 580 | 17 | 529 | 11 |
| Cohort 2009 | $\mathbf{6}$ | 547 |  | 499 |  |
| $\mathbf{2 0 1 0}$ | $\mathbf{7}$ | 568 | 21 | 524 | 25 |
| $\mathbf{2 0 1 1}$ | $\mathbf{8}$ | 579 | 11 | 531 | 7 |
| Cohort 2010 | $\mathbf{6}$ | 550 |  | 507 |  |
| $\mathbf{2 0 1 1}$ | $\mathbf{7}$ | 567 | 17 | 524 | 17 |
| $\mathbf{2 0 1 2}$ | $\mathbf{8}$ | 580 | 13 | 536 | 12 |

For these cohorts, reading is used to illustrate how the vertical scale data can be interpreted. The cohort of Grade 6 students that was started in 2010 was tested as Grade 8 students in 2012. The information in the table for reading can be interpreted in the following manner for the Grade 6 cohort that began in 2010:

- The average reading vertical scale score for the 2010 Grade 6 cohort was 507 . This is higher than the average scores for each of the four previous cohorts, with each cohort scoring higher than the one before.
- In 2011, when this cohort was tested in reading as Grade 7 students, its average vertical scale score was 524 , reflecting an overall within cohort growth of 17 scale score points.
- For the same cohort, when tested in reading as Grade 8 students in 2012, its average vertical score was 536. This was higher than each of the previous Grade 8 cohort's scale scores, registering an average growth of 12 within cohort scale score points between Grade 7 and Grade 8 .

CONNECTICUT ACADEMIC PERFORMANCE TEST (CAPT)
Percentage of Students Scoring Below Basic, Basic, Proficient, Goal, and Advanced By Content Area and Year

$\square$
Below Basic

Basic

Proficient

Goal


------------- Percentage of Students Performing At or Above the Proficient Level

Connecticut students demonstrated improvement on the CAPT in most content areas compared to the baseline year of 2007. However, comparing 2011 data with 2012 data shows mixed results. When looking at the performance of students over time, it is important to note that the CAPT Modified Assessment System (CAPT MAS) in reading and mathematics was piloted in 2009 and fully implemented in 2010. Therefore, when comparing scores after 2008, one should acknowledge that students selected for the CAPT MAS in reading and mathematics are not included among students taking the standard CAPT in those subject areas.

## Mathematics

The 2012 results for mathematics show a moderate increase in the percentage of students statewide at or above Proficient and, and an even greater increase in the percentage of students at or above Goal from the 2007 baseline year. However, more students performed at or above Proficiency in 2011 than in 2012. There was also a slight decrease from 2011 to 2012 in the percentage of students performing at or above Goal, but that percentage was fairly constant. An increase in the percentage of students at Below Basic and Advanced are seen compared to last year.

## Science

Overall progress from the 2007 baseline year in science results is mixed. The percentage of students at or above Proficient has decreased since 2007, but the percentage of students scoring at or above Goal has seen a moderate increase from the baseline year. Similarly, the percentage of students scoring at or above Proficient decreased from 2011 to 2012, while the percentage of students scoring at or above Goal increased from 2011 to 2012. There was a small decrease in the percentage of students at the Advanced level from 2011 to 2012 and the percentage of students scoring Below Basic has increased since 2011.

## Reading across the Disciplines

There have been overall gains for reading across the disciplines in both the percentage of students scoring at or above Proficient and the percentage of students at or above Goal when 2012 data are compared to the baseline data from 2007. Progress from 2011 to 2012 in reading across the disciplines is mixed. There was a decrease in the percentage of students at or above Proficient. However, there was an increase in the percentage of students scoring at or above Goal from 2011 to 2012. The percentage of students at Below Basic has increased from 2011 to 2012.

## Writing across the Disciplines

There have been strong overall gains in writing across the disciplines in both the percentage of students at or above Proficient and the percentage of students at or above Goal. Also, the percentage of students at the Below Basic level has steadily decreased since 2007, while the percentage of students at the Advanced level has increased strongly from 2007 to 2012. Increases from 2011 to 2012 continue to reflect this upward trend. The percentage of students at or above Proficient rose slightly from last year, and the percentage of students at or above Goal showed a moderate increase from 2011 to 2012.

Table 4: 2007-2012 CAPT Performance for Percent At/Above Proficient and At/Above Goal

|  | Mathematics |  | Science |  | Reading Across the <br> Disciplines |  | Writing Across the <br> Disciplines |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal |
| 2007 | 77.3 | 45.3 | 81.4 | 44.5 | 79.7 | 45.5 | 82.3 | 53.0 |
| 2008 | 79.7 | 50.2 | 80.5 | 46.5 | 82.7 | 45.5 | 88.2 | 57.9 |
| 2009 | 78.4 | 48.0 | 78.4 | 43.0 | 81.8 | 47.5 | 86.5 | 55.0 |
| 2010 | 78.8 | 48.9 | 81.5 | 45.5 | 82.9 | 45.9 | 86.2 | 59.6 |
| 2011 | 80.3 | 49.6 | 81.7 | 47.2 | 81.9 | 44.8 | 88.6 | 61.3 |
| $\mathbf{2 0 1 2}$ | $\mathbf{7 8 . 8}$ | $\mathbf{4 9 . 3}$ | $\mathbf{8 0 . 2}$ | $\mathbf{4 7 . 3}$ | $\mathbf{8 0 . 9}$ | $\mathbf{4 7 . 5}$ | $\mathbf{8 8 . 8}$ | $\mathbf{6 3 . 1}$ |

## Subgroup Performance and the Achievement Gap

## Eligibility for Free- or Reduced-Price Meals

The 2012 CMT and CAPT results show wide income-achievement gaps, with more than twice the percentage of higher-income students performing at or above Goal than lower income students in many grade levels and content areas. This analysis of the income-based achievement gap uses data on whether a student is eligible to receive free or reduced priced lunch as proxy for poverty.

Different metrics paint a complex picture of how the gap in achievement has changed over time. Examining changes in the percentage of students who perform at or above Proficient and Goal shows that in virtually every grade level and content area, economically disadvantaged students have made more significant gains between 2006 and 2012 compared to their peers, which has narrowed the achievement gap for this subgroup of students. However, vertical scale score data, which measures cohort growth over time, shows that the gap between students in Grade 3 and Grade 8 persists, and in some cases, widens from year to year.

## Achievement Gap Trends

One way to measure whether Connecticut has made progress in narrowing the achievement gap between economically disadvantaged students and their peers is to compare the percentage of students performing at or above Proficient or Goal in a particular grade from one year to the next. Tables 8, 9, and 10 below provide this information for the years 2006, 2011, and 2012 in Grades 3, 8, and 10.

These data show that between 2006 and 2012, students who are eligible for free- or reduced-price meals made larger gains on the CMT in the percentage of students who score at or above Goal level than students who are not eligible for free- or reduced-price meals. This is true in all content areas and in most grades. For example, in reading, students who are eligible for free- or reduced price-meals made larger gains in all grades when compared to students who are not eligible for free- or reduced-price meals. Performance trends from 2011 to 2012 demonstrate similar gains: free- or reduced-price meal students made larger gains in the percentage at or above Goal in four of the six grades in reading and writing when compared with students who are not eligible for free- or reduced-price meals.

On the CAPT, students who are eligible to receive free- or reduced-price meals have made moderate progress in some content areas and levels since 2007. At the Proficient level for math and reading, students eligible for free- or reduced-price meals have narrowed the gap with their peers from higher-income families since 2007. However, for those content areas, the gap has remained constant or widened when compared to 2011. In writing, students from low-income families have made large gains when compared to their peers in a higher-income group. The gap in writing scores at the Proficient level has decreased steadily, from 27.8 percent in 2007 to 18.9 percent in 2012. At the Goal level, the income achievement gap has mostly remained constant, and, in some instances, the gap has increased slightly when compared to the CAPT baseline of 2007. For example, while the difference between students from low-income families and their peers from higher-income families scoring at the Goal level in reading decreased slightly from 2011 to 2012, the gap has increased from 37.5 percent in 2007 to 38.7 percent in 2012.

Table 5: Grade 3 CMT Free- or Reduced-Price Meal Comparison

|  |  | Mathematics |  | Reading |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup | Year | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal |
|  | 2006 | 58.1 | 30.8 | 42.5 | 24.5 | 64.2 | 36.4 |
|  | 2011 | 69.1 | 40.7 | 53.5 | 34.0 | 66.4 | 39.8 |
|  | 2012 | 71.6 | 44.1 | 54.3 | 35.2 | 69.8 | 42.0 |
| Full Price Meals | 2006 | 87.3 | 67.7 | 81.0 | 67.6 | 89.3 | 71.7 |
|  | 2011 | 92.9 | 76.0 | 85.4 | 72.0 | 89.6 | 73.5 |
|  | 2012 | 94.1 | 79.9 | 86.1 | 73.1 | 91.3 | 75.2 |


|  |  | Mathematics |  | Reading |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference by <br> Economic Status | Year | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal |
|  | 2006 | 29.2 | 36.9 | 38.5 | 43.1 | 25.1 | 35.3 |
|  | 2011 | 23.8 | 35.3 | 31.9 | 38.0 | 23.2 | 33.7 |
|  | 2012 | 22.5 | 35.8 | 31.8 | 37.9 | 21.5 | 33.2 |

Table 6: Grade 8 CMT Free- or Reduced-Price Meal Comparison

|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup | Year | percent At/Above Proficient | percent <br> At/Above <br> Goal | percent At/Above Proficient | percent <br> At/Above <br> Goal | percent At/Above Proficient | percent <br> At/Above <br> Goal | percent At/Above Proficient | $\begin{aligned} & \text { percent } \\ & \text { At/Above } \\ & \text { Goal } \end{aligned}$ |
| Free/ReducedPrice Meals | 2006 | 54.8 | 26.5 | 51.8 | 37.6 | 63.5 | 35.3 | NA | NA |
|  | 2011 | 69 | 39.3 | 65.4 | 51.2 | 63.5 | 38.7 | 51.6 | 34.7 |
|  | 2012 | 71.5 | 40.6 | 70.4 | 54.8 | 72.2 | 44.4 | 54.1 | 34.8 |
| Full Price Meals | 2006 | 87.9 | 70.2 | 85.9 | 77.6 | 88.8 | 72.5 | NA | NA |
|  | 2011 | 94.2 | 80.2 | 92.1 | 86.1 | 90.7 | 78 | 88.3 | 77.9 |
|  | 2012 | 94.8 | 80.7 | 94 | 87.7 | 93.5 | 80.9 | 89.1 | 76.4 |


|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference by Economic Status | Year | \% <br> At/Above Proficient | \% <br> At/Above Goal | \% <br> At/Above Proficient | \% <br> At/Above Goal | percent <br> At/Above <br> Proficient | percent At/Above Goal | percent At/Above Proficient | percent At/Above Goal |
|  | 2006 | 33.1 | 43.7 | 34.1 | 40.0 | 25.3 | 37.2 | NA | NA |
|  | 2011 | 25.2 | 40.9 | 26.7 | 34.9 | 27.2 | 39.3 | 36.7 | 43.2 |
|  | 2012 | 23.3 | 40.1 | 23.6 | 32.9 | 21.3 | 36.5 | 35.0 | 41.6 |

Table 7: CAPT Free- or Reduced-Price Meal Comparison

|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup | Year | percent <br> At/Above <br> Proficient | percent At/Above Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent At/Above Goal | percent <br> At/Above <br> Proficient | percent At/Above Goal |
| F/R Meals | 2007 | 48.8 | 14.4 | 54.9 | 16.8 | 60.9 | 23.4 | 55 | 13.7 |
|  | 2008 | 53.4 | 17.9 | 60.4 | 16.2 | 72.2 | 27.3 | 53.2 | 15.8 |
|  | 2009 | 51.9 | 17 | 59.8 | 19.1 | 69.2 | 25.2 | 50.4 | 13.5 |
|  | 2010 | 54.1 | 18.6 | 62.4 | 17.5 | 69.4 | 31.5 | 57.3 | 16.4 |
|  | 2011 | 57.5 | 19.9 | 61.7 | 16.9 | 75.1 | 33.7 | 59.2 | 18.2 |
|  | 2012 | 55.4 | 20.2 | 60.8 | 20.3 | 75.6 | 36.4 | 56.6 | 18.9 |
| Full-Price Meals | 2007 | 85.9 | 54.7 | 87.3 | 54.3 | 88.7 | 61.9 | 89.5 | 53.9 |
|  | 2008 | 88.3 | 60.8 | 90 | 55.2 | 93.4 | 68 | 89.5 | 56.6 |
|  | 2009 | 87.4 | 58.5 | 89.3 | 57.1 | 92.4 | 65.3 | 88 | 53.2 |
|  | 2010 | 88.1 | 60.2 | 90.6 | 56.6 | 92.6 | 70.3 | 90.9 | 56.7 |
|  | 2011 | 89.4 | 61.5 | 90 | 55.9 | 94.1 | 72.6 | 91 | 59.2 |
|  | 2012 | 88.5 | 61.5 | 89.3 | 59 | 94.5 | 74.6 | 90.5 | 59.6 |


|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Difference by Economic Status | Year | percent <br> At/Above <br> Proficient | percent At/Above Goal | percent <br> At/Above <br> Proficient | percent At/Above Goal | percent <br> At/Above <br> Proficient | percent At/Above Goal | percent At/Above Proficient | $\begin{gathered} \text { percent } \\ \text { At/Above } \end{gathered}$ Goal |
|  | 2007 | 37.1 | 40.3 | 32.4 | 37.5 | 27.8 | 38.5 | 34.5 | 40.2 |
|  | 2008 | 34.9 | 42.9 | 29.6 | 39.0 | 21.2 | 40.7 | 36.3 | 40.8 |
|  | 2009 | 35.5 | 41.5 | 29.5 | 38.0 | 23.2 | 40.1 | 37.6 | 39.7 |
|  | 2010 | 34.0 | 41.6 | 28.2 | 39.1 | 23.2 | 38.8 | 33.6 | 40.3 |
|  | 2011 | 31.9 | 41.6 | 28.3 | 39.0 | 19.0 | 38.9 | 31.8 | 41.0 |
|  | 2012 | 33.1 | 41.3 | 28.5 | 38.7 | 18.9 | 38.2 | 33.9 | 40.7 |

## Achievement Gap Trends based on Vertical Scale Cohort Growth

Using data on the eligibility for a student to receive a free- or reduced-price lunch as a proxy for poverty reveals a persistent achievement gap between low-poverty and high-poverty students in the state. One way to assess this gap is to examine the differences between the mean vertical scale scores of members of each of these groups and to follow the same groups of students (or cohort) through several years. Because vertical scale scores have been adjusted, valid comparisons can be made between grade levels: a difference of 30 vertical scale points in Grade 3 is equivalent to a difference of 30 vertical scale points in Grade 8. Vertical scale scores are available in the content areas of mathematics and reading for all CMT grades. By comparing how far apart these groups performed when they were in Grade 3, and each year through Grade 8, performance for the same group of students can be tracked through all six of the grades in which they took the CMT.

## Mathematics

Vertical scale scores show that the income-based achievement gap between high- and low-poverty students in mathematics widened as the cohort progressed from grade 3 to grade 8 . For the students who were in Grade 3 in 2007, and matriculated through to Grade 8 in 2012, the gap between low- and higher-income students began as a 33 point difference in Grade 3, and increased to a 45 point difference in Grade 8.

Table 8: Mathematics CMT Scale Scores for Cohort beginning in 2007

| Year | Grade | Low Poverty | High Poverty | Difference |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | 3 | 463 | 430 | 33 |
| 2008 | 4 | 505 | 466 | 39 |
| 2009 | 5 | 539 | 502 | 37 |
| 2010 | 6 | 565 | 524 | 41 |
| 2011 | 7 | 583 | 540 | 43 |
| 2012 | 8 | 597 | 552 | 45 |



## Reading

Vertical scale scores show that the income-based achievement gap between high- and low-poverty students in reading was persistent but narrowed slightly as the cohort progressed from Grade 3 to Grade 8. For the low- and high-poverty groups, the students who were in Grade 3 in 2007 and matriculated through to Grade 8 in 2012 received the following scale scores in reading.

Table 9: Reading CMT Scale Scores for Cohort beginning in 2007

| Year | Grade | Low Poverty | High Poverty | Difference |
| :--- | :--- | :--- | :--- | :--- |
| 2007 | 3 | 438 | 393 | 45 |
| 2008 | 4 | 467 | 421 | 46 |
| 2009 | 5 | 495 | 454 | 41 |
| 2010 | 6 | 523 | 480 | 43 |
| 2011 | 7 | 540 | 497 | 43 |
| 2012 | 8 | 551 | 510 | 41 |



The difference measured on the vertical scale begins at 45 in Grade 3, and decreases to 41 in Grade 8. On balance, the achievement gap between the high- and low-poverty groups is constant for this cohort of students in reading.

## English Language Learners

When looking at trends from 2006 to 2012, English Language Learners (ELL) continue to perform significantly lower than students who are non-ELL. Additionally, the gap between English Language Learners and other students has widened significantly over this period. The ELL subgroup made smaller gains in the percentage of students scoring at or above Proficient and at or above Goal than students who are non-ELL students. This is true in all content areas and all grades. For example, in mathematics in Grade 3,
the percentage of ELL students who scored at or above Goal increased by only 2.8 percent since 2006, while non-ELL students' scores increased by 10.7 percent.

Performance trends from 2011 to 2012 demonstrate mixed results when looking at the change in percentage of students scoring at or above Proficient and Goal. In most instances, the increase in the percentage of students scoring at or above Proficient and at or above Goal was lower for ELL students than for other students. However, in two grades in math, ELL students increased their percentage at or above Goal by a margin that was greater than non-ELL students.

Table 10: CMT Grade 3 Comparison: ELL Non-ELL

|  |  | Mathematics |  | Reading |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup |  | percent <br> At/Above <br> Prof | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Prof | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Prof | Percent <br> At/Above <br> Goal |
|  | 2006 | 52.7 | 27.1 | 30.5 | 15.2 | 55.3 | 29.1 |
|  | 2011 | 60.3 | 31.0 | 31.3 | 14.2 | 53.1 | 24.9 |
|  | 2012 | 58.4 | 29.9 | 29.9 | 14.4 | 56.0 | 24.9 |
| Non-ELL | 2006 | 80.1 | 58.4 | 71.9 | 57.1 | 83.5 | 63.2 |
|  | 2011 | 85.9 | 65.4 | 76.7 | 61.2 | 83.0 | 63.5 |
|  | 2012 | 87.5 | 69.1 | 77.2 | 62.0 | 85.0 | 65.2 |

Table 11: CMT Grade 8 Comparison: ELL Non-ELL

|  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELL | Year | percent At/Above Prof | percent At/Above Goal | percent At/Above Prof | percent At/Above Goal | percent At/Above Prof | percent At/Above Goal | percent At/Above Prof | percent At/Above Goal |
|  | 2006 | 40.2 | 16.4 | 24.3 | 14.7 | 41.3 | 16.8 | NA | NA |
|  | 2011 | 37.5 | 13.3 | 22.4 | 10.7 | 29.2 | 9.2 | 15.1 | 6.5 |
|  | 2012 | 37.0 | 12.3 | 23.0 | 8.8 | 34.9 | 9.6 | 14.7 | 4.4 |
| Non-ELL | 2006 | 80.3 | 59.8 | 78.5 | 68.6 | 83.3 | 64.0 | NA | NA |
|  | 2011 | 87.8 | 68.8 | 85.6 | 77.0 | 83.6 | 66.9 | 78.3 | 65.6 |
|  | 2012 | 88.7 | 69.1 | 88.1 | 78.9 | 88.0 | 70.4 | 79.3 | 64.1 |

Table 12: CAPT Comparison: ELL Non-ELL

|  |  | Mathematics |  | Science |  | Reading |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup | Year | percent <br> At/Above <br> Proficient | $\begin{gathered} \text { percent } \\ \text { At/Above } \\ \text { Goal } \end{gathered}$ | percent <br> At/Above <br> Proficient | $\begin{gathered} \text { percent } \\ \text { At/Above } \\ \text { Goal } \end{gathered}$ | percent <br> At/Above <br> Proficient | $\begin{gathered} \text { percent } \\ \text { At/Above } \\ \text { Goal } \end{gathered}$ | percent <br> At/Above <br> Proficient | percent At/Above Goal |
| ELL | 2007 | 34.1 | 9.4 | 32.6 | 5.4 | 37.7 | 7.8 | 41.3 | 8.9 |
|  | 2008 | 35.3 | 8.4 | 25.1 | 3.9 | 38.0 | 6.0 | 46.9 | 8.8 |
|  | 2009 | 35.8 | 9.0 | 23.8 | 2.7 | 35.1 | 6.6 | 46.7 | 8.1 |
|  | 2010 | 37.9 | 9.0 | 28.9 | 3.6 | 42.0 | 7.3 | 44.0 | 11.0 |
|  | 2011 | 31.0 | 5.8 | 22.8 | 3.0 | 33.7 | 4.2 | 48.1 | 9.4 |
|  | 2012 | 27.7 | 6.5 | 20.0 | 2.9 | 33.5 | 6.2 | 47.2 | 10.1 |
| NonELL | 2007 | 78.6 | 46.5 | 83.0 | 45.8 | 81.0 | 46.7 | 83.5 | 54.4 |
|  | 2008 | 81.1 | 51.6 | 82.3 | 47.9 | 84.0 | 46.7 | 89.5 | 59.5 |
|  | 2009 | 79.8 | 49.2 | 80.1 | 44.2 | 83.2 | 48.7 | 87.7 | 56.5 |
|  | 2010 | 80.2 | 50.2 | 83.4 | 47.0 | 84.3 | 47.2 | 87.7 | 61.2 |
|  | 2011 | 82.0 | 51.1 | 83.8 | 48.8 | 83.5 | 46.1 | 90.0 | 63.1 |
|  | 2012 | 80.5 | 50.7 | 82.4 | 48.9 | 82.4 | 48.8 | 90.3 | 64.9 |

## Students by Ethnicity/Race

Beginning in 2011, Ethnicity/Race reporting changed. As a result of new United States Department of Education guidance, students are now categorized in one of the following seven groups: Hispanic/Latino, American Indian or Alaskan Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White, and Two or More Ethnicity/Races. For reporting purposes, students are classified as Hispanic/Latino, regardless of their race. Students who are not Hispanic/Latino are placed in one of the Ethnicity/Race categories, unless they belong to the Two or More Ethnicity/Race categories.

## Racial Subgroup Student Performance on the CMT

The 2011 and 2012 CMT results for the seven ethnicity/race categories are shown below in Table 16. Other than Native Hawaiian or Other Pacific Islander students, these data show an increase in performance in most content areas for all students of all Ethnicity/Race categories for Grades 3 and 8. Performance gaps persist, however, with black and Hispanic students generally scoring at lower levels than students of other races and ethnicities.

The 2011 and 2012 results show that black and Hispanic students scored significantly lower than white students in all content areas. However, in Grades 3 and 8 reading and writing, the percentage gain in black students scoring at or above the Goal level was larger than white students.

Table 13: CMT Performance Data by Ethnicity/Race for Grades 3 and 8: 2011 and 2012

|  |  |  | Mathematics |  | Reading |  | Writing |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | Ethnicity/Race | Year | percent At/Above Proficient | percent <br> At/Above <br> Goal | $\begin{array}{\|c\|} \hline \text { percent } \\ \text { At/Above } \\ \text { Proficient } \\ \hline \end{array}$ | percent At/Above Goal | percent At/Above Proficient | $\begin{array}{\|c\|} \hline \text { percent } \\ \text { At/Above } \\ \text { Goal } \\ \hline \end{array}$ | percent At/Above Proficient | $\begin{array}{\|c\|} \hline \text { percent } \\ \text { At/Above } \\ \text { Goal } \\ \hline \end{array}$ |
| 3 | Hispanic/Latino | 2011 | 69.6 | 41.1 | 53.1 | 33.7 | 66.0 | 40.0 | N/A | N/A |
|  |  | 2012 | 72.2 | 44.8 | 53.6 | 34.6 | 70.3 | 42.3 | N/A | N/A |
|  | American Indian or Alaskan Native | 2011 | 80.2 | 55.7 | 69.8 | 39.6 | 78.0 | 54.1 | N/A | N/A |
|  |  | 2012 | 80.8 | 52.5 | 67.0 | 53.0 | 80.5 | 57.7 | N/A | N/A |
|  | Black or African American | 2011 | 66.5 | 36.4 | 53.9 | 33.7 | 68.3 | 42.1 | N/A | N/A |
|  |  | 2012 | 67.2 | 38.3 | 54.1 | 34.1 | 70.2 | 42.3 | N/A | N/A |
|  | Asian | 2011 | 95.0 | 82.4 | 83.0 | 70.3 | 92.6 | 78.0 | N/A | N/A |
|  |  | 2012 | 94.0 | 83.0 | 84.4 | 72.7 | 92.6 | 78.9 | N/A | N/A |
|  | Native Hawaiian or Other Pacific Islander | 2011 | 88.9 | 72.2 | 83.3 | 77.8 | 84.2 | 84.2 | N/A | N/A |
|  |  | 2012 | 92.3 | 88.5 | 88.9 | 77.8 | 89.3 | 67.9 | N/A | N/A |
|  | White | 2011 | 91.5 | 73.8 | 83.5 | 69.8 | 87.5 | 70.2 | N/A | N/A |
|  |  | 2012 | 93.2 | 78.1 | 84.3 | 70.9 | 89.4 | 72.3 | N/A | N/A |
|  | Two or More | 2011 | 84.1 | 65.8 | 74.7 | 60.8 | 80.8 | 62.0 | N/A | N/A |
|  |  | 2012 | 86.9 | 67.1 | 76.0 | 61.8 | 84.1 | 62.8 | N/A | N/A |
| 8 | Hispanic/Latino | 2011 | 67.7 | 39.2 | 63.6 | 49.9 | 62.1 | 38.1 | 50.4 | 33.5 |
|  |  | 2012 | 70.3 | 40.4 | 68.8 | 53.6 | 71.4 | 44.0 | 52.8 | 33.9 |
|  | American Indian or Alaskan Native | 2011 | 86.8 | 55.4 | 81.7 | 65.8 | 74.8 | 57.3 | 71.2 | 53.8 |
|  |  | 2012 | 86.6 | 60.5 | 82.5 | 73.3 | 83.7 | 65.0 | 75.6 | 55.3 |
|  | Black or African American | 2011 | 67.7 | 37.0 | 66.2 | 51.4 | 64.9 | 39.5 | 49.6 | 31.9 |
|  |  | 2012 | 70.1 | 37.4 | 71.1 | 54.5 | 74.0 | 44.4 | 52.0 | 31.0 |
|  | Asian | 2011 | 95.6 | 85.3 | 91.8 | 86.7 | 91.9 | 80.1 | 87.3 | 78.1 |
|  |  | 2012 | 95.1 | 84.8 | 91.9 | 86.3 | 93.6 | 82.8 | 88.1 | 76.4 |
|  | Native Hawaiian or Other Pacific Islander | 2011 | 90.0 | 50.0 | 90.0 | 60.0 | 90.0 | 70.0 | 70.0 | 70.0 |
|  |  | 2012 | 71.0 | 45.2 | 65.5 | 58.6 | 75.0 | 56.3 | 54.3 | 37.1 |
|  | White | 2011 | 93.7 | 78.8 | 91.3 | 84.9 | 89.6 | 76.2 | 87.5 | 76.9 |
|  |  | 2012 | 94.7 | 79.7 | 93.6 | 87.1 | 92.6 | 79.5 | 88.6 | 75.9 |
|  | Two or More | 2011 | 87.0 | 61.6 | 83.0 | 74.2 | 80.8 | 64.3 | 74.8 | 60.8 |
|  |  | 2012 | 85.6 | 65.6 | 85.8 | 76.4 | 86.6 | 68.3 | 76.1 | 59.8 |

## Racial Subgroup Student Performance on the Connecticut Academic Performance Test

The 2011 and 2012 CAPT results for the seven Ethnicity/Race categories are shown below in Table 17. The results for racial and ethnic subgroups are mixed, with increases in the percent at or above Goal in mathematics, reading, and writing for black students and Hispanic students. Decreases were seen in the percent at or above Proficient in mathematics and science for these subgroups.

Table 14: CAPT Performance Data by Ethnicity/Race for from 2011 and 2012

|  |  | Mathematics |  | Science |  | Reading |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subgroup | Year | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> (t/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal | percent <br> At/Above <br> Proficient | percent <br> At/Above <br> Goal |
|  | 2011 | 51.8 | 14.6 | 57.6 | 15.2 | 58.8 | 13.8 | 75.4 | 31.6 |
| American | 2012 | 50.4 | 15.6 | 53.5 | 15.1 | 59.7 | 18.7 | 76.8 | 35.9 |
| Hispanic/ | 2011 | 59.5 | 20.2 | 58.7 | 18.9 | 64.8 | 19.0 | 75.3 | 36.3 |
| Latino | 2012 | 56.3 | 20.6 | 56.6 | 19.6 | 62.5 | 21.7 | 76.4 | 37.4 |
| White | 2011 | 89.9 | 62.1 | 91.5 | 59.4 | 89.9 | 55.8 | 93.9 | 72.1 |
|  | 2012 | 89.1 | 61.8 | 91.1 | 60.0 | 89.1 | 58.6 | 94.1 | 74.2 |
| Asian | 2011 | 89.4 | 65.5 | 87.5 | 60.1 | 89.2 | 58.3 | 93.9 | 75.5 |
|  | 2012 | 89.6 | 66.3 | 88.6 | 59.9 | 88.6 | 62.5 | 93.8 | 76.8 |
| American Indian | 2011 | 68.4 | 25.3 | 68.5 | 26.1 | 67.0 | 20.3 | 74.6 | 38.9 |
| or AK Native | 2012 | 76.1 | 33.6 | 72.6 | 38.5 | 70.9 | 33.6 | 85.3 | 52.9 |
| Native Hawaiian | 2011 | 76.7 | 33.3 | 75.0 | 28.1 | 76.7 | 36.7 | 86.7 | 56.7 |
| or Other Pac. Isl. | 2012 | 60.0 | 40.0 | 65.6 | 40.6 | 62.1 | 31.0 | 69.7 | 39.4 |
| Two or More | 2011 | 79.1 | 46.7 | 80.5 | 46.3 | 81.5 | 41.3 | 91.2 | 60.4 |
| Ethnicities/Races | 2012 | 69.3 | 37.8 | 72.5 | 36.3 | 76.2 | 37.1 | 83.3 | 52.7 |

## State Initiatives

Because Connecticut's new accountability system captures increases in student achievement across all five performance bands, the Department of Education will be better able to identify which schools have the highest concentrations of low performing students and more accurately assess the progress schools are making. NCLB identified, and imposed sanctions on, all schools that missed AYP. Connecticut's waiver lifts these sanctions and instead, with initiatives established in Public Act 12-116, An Act Concerning Educational Reform, provides new mechanisms for low performing districts and schools to get the resources and support they need to improve student achievement.

## Alliance Districts

Public Act 12-116 authorized the State Department to identify Connecticut's 30 lowest performing districts as Alliance Districts. These districts will receive an additional $\$ 39.5$ million in Education Cost Sharing funding, conditional upon clear plans for reform. In addition, the Act authorizes intensive interventions in Connecticut's lowest performing schools over the next three years. The Commissioner's Network is designed to serve as a vehicle for the provision of support in and engagement with such individual low performing schools.

While some Alliance Districts have shown progress over the past six years, their performance still lags far behind the state. In many tested grades and content areas the majority of students in these districts are not performing at the Goal level. The graphs on the following pages illustrate the difference in performance between Alliance Districts and non-Alliance Districts. Grades 5 and 8 were chosen as examples because the science CMT and CAPT are only taken in those grades.

Despite some gains, the performance gap for grades 5, 8, and 10 between Alliance Districts and non-Alliance districts remains wide.

Between 2011 and 2012, 29 Alliance Districts have increased the percentage of students in Grade 5 performing at or above the Proficient level in reading, and 27 Alliance Districts have increased the percentage of Grade 5 students performing at or above the Goal level in that content area. However, 23 Alliance Districts experienced decreases in the percentage of Grade 5 students performing at or above the Proficiency level for Grade 5 math. In Grade 5 science, the results are mixed: about half of Alliance Districts saw increases in the performance of their students at or above the Proficient level. Students from Alliance Districts, which educate about one-third of Connecticut's students, make up 70 percent of the Grade 5 students who score Below Basic in mathematics and are overly represented at the Basic and Below Basic levels for reading and science.

In Grade 8, 21 Alliance Districts increased the percentage of students scoring at or above the Proficiency level for math, 27 districts increased the percentage in reading, and 27 increased the percentage in science. Grade 8 science data showed that 15 Alliance Districts increased the percentage of students scoring at or above the Goal level since 2011. While this improvement should be recognized, it is important to consider that fewer than 40 percent of students in Alliance Districts achieve at this level while the statewide average is 62.1 percent.

Between 2011 and 2012, 18 Alliance Districts decreased the percentage of Grade 10 students scoring at or above Proficient for math while 20 districts increased the percentage of students performing at or above Goal. Similar trends can be found in reading and writing. Grade 10 reading results in 13 Alliance districts show that the percentage of students scoring at or above Proficient decreased, while the percentage of students scoring at or above Goal increased. In Grade 10 writing, 14 Alliance Districts increased the percentage of students performing at or above Proficiency, while 18 Alliance Districts increased the percentage of students performing at or above Goal. Despite student performance increases in some Alliance Districts for Grade 10, the percentage of students in Alliance District schools continue to lag behind their peers in average performance.

The graphs on the following pages compare Alliance District Grade 5 and Grade 8 data for all four CMT content areas with data from all non-Alliance Districts in the state for the same grades and content areas in two different ways. The first set of graphs compares 2012 CMT data for Alliance Districts to non-Alliance Districts. The second set uses vertical scale scores to compare the cohort growth over time for students in Alliance Districts to students in non-Alliance Districts.

## ALLIANCE DISTRICTS COMPARED TO REST OF STATE GRADE 5

Percentage of Students Scoring Below Basic, Basic, Proficient, Goal, and Advanced By Content Area


| Below Basic | Basic | Proficient | Goal | Advanced |
| :---: | :---: | :---: | :---: | :---: |
| \\|\|\|\|\|\|\| Percentage of Students Performing At or Above the Goal Level |  |  |  |  |
| Percentage of Students Performing At or Above the Proficient Level |  |  |  |  |

## ALLIANCE DISTRICTS COMPARED TO REST OF STATE GRADE 8

Percentage of Students Scoring Below Basic, Basic, Proficient, Goal, and Advanced By Content Area



------------- Percentage of Students Performing At or Above the Proficient Level

## Vertical Scale Growth Math: Alliance Districts vs. Non-Alliance Districts



Table 15: Alliance and Non-Alliance District Vertical Scale Scores

| Math |  |  |  |
| :---: | :---: | :---: | :---: |
| Grade | Alliance | Rest of State | Difference |
| 3 | 438 | 462 | -24 |
| 4 | 475 | 503 | -28 |
| 5 | 510 | 538 | -28 |
| 6 | 530 | 563 | -33 |
| 7 | 547 | 582 | -35 |
| 8 | 557 | 596 | -39 |

Despite increases in vertical scale scores over grade levels in Alliance Districts, a gap remains - and widens as grade levels progress - between Alliance Districts' vertical scale growth and that of the rest of the state in mathematics. At Grade 3, there is a 24 point vertical scale score difference between Alliance Districts and the rest of the state in mathematics; this difference widens to 39 points by Grade 8 .

## Vertical Scale Growth Reading: Alliance Districts vs. Non-Alliance Districts



Table 16: Alliance and Non-Alliance District Vertical Scale Scores

| Reading |  |  |  |
| :---: | :---: | :---: | :---: |
| Grade | Alliance | Rest of State | Difference |
| 3 | 403 | 437 | -34 |
| 4 | 431 | 465 | -34 |
| 5 | 463 | 493 | -30 |
| 6 | 488 | 521 | -33 |
| 7 | 504 | 538 | -34 |
| 8 | 517 | 550 | -33 |

The gap in vertical scale growth in reading between Alliance Districts and the rest of the state remains relatively constant at around 33 points.

## Grade 3 Reading

Public Act 12-116 establishes a number of programs and interventions aimed at increasing student literacy in the early grades. Students from low-income families (as measured by eligibility for free and reduced-price meals) are reading far below their peers by the third grade. The gap in students scoring at Proficient, between low-income students in Grade 3 and other students in Grade 3, has closed since 2006, though it is still wide ( 42.5 percent vs. 81 percent in 2006; 54.3 percent vs. 86.1 percent in 2012). Students from low-income families continue to perform at or above the Goal level on the Grade 3 Reading CMT at a rate that is less than half that of their higher-income peers ( 24.5 percent vs. 67.6 percent in 2006; 35.2 percent vs. 73.1 percent in 2012).

Comparing 2011 to 2012 data reveals identical increases in the percent of students scoring at the Proficient level for students from both low and high income families. The percent of Students scoring at the proficient level from low-income families increased .7 percent ( $53.6 \%$ to $54.3 \%$ ) and the percent of students from higher-income families scoring at the Proficient level also increased by $.7 \%$ ( $85.4 \%$ to $86.1 \%$ ).

Nearly one-quarter of Grade 3 students statewide have reached the Advanced level in reading in 2012. This percentage has increased from 16.7 percent in 2006 to 23.5 percent in 2012. However, these gains have been made disproportionately in non-Alliance Districts. The Alliance Districts tested about 15,300 Grade 3 students on the standard CMT reading assessment but only about 1,800 students reached the Advanced level or less than 12 percent.

Table 17: Grade 3 CMT Reading Comparison for Free- or Reduced- Price Meals and Full Price Meals: 2006, 2011, and 2012

|  |  | Reading |  |
| :---: | :---: | :---: | :---: |
| Subgroup | Year | Percent At <br> or Above <br> Proficient | Percent At <br> or Above <br> Goal |
|  | 2006 | 42.5 | 24.5 |
|  | 2011 | 53.5 | 34.0 |
|  | 2012 | 54.3 | 35.2 |
| Full Price Meals | 2006 | 81.0 | 67.6 |
|  | 2011 | 85.4 | 72.0 |
|  | 2012 | 86.1 | 73.1 |

## Students with Disabilities

## The CMT and CAPT Modified Assessment System (CMT MAS \& CAPT MAS)

In March 2012, the CAPT and CMT Modified Assessment System (MAS) were administered for the third time. The MAS is one of two United States Department of Education approved alternate assessments used in Connecticut. It is an alternate test for mathematics and reading only and is available for identified students with disabilities for whom the standard CAPT or CMT is inappropriate. Students are identified to take the MAS through multiple valid measures. They are students who, because of their disabilities, would be unlikely to achieve a Proficient score on the standard test, but who might be better able to demonstrate their capabilities on the modified test. A student with disabilities may qualify for this alternate test in one or both of the reading or math subject areas. These students must also take the standard grade-level writing and science tests. There are three standards that have been established for performance on the MAS: Basic, Proficient, and Goal.

## Student Performance on the Grades 3 and 8 Modified Assessment System (CMT MAS)

Of the 2012 total tested CMT population, 4.3 percent participated in the MAS reading test and 3.5 percent participated in the MAS mathematics test.

Table 18 provides information about the number of students who were administered the CMT MAS mathematics and reading assessment in 2010 (the baseline year for the MAS) through 2012, and the percentage scoring at the Proficient and Goal levels each year. The percentage of students meeting Proficient and Goal levels of performance on the MAS in Grade 3 mathematics and Grade 8 mathematics is lower in 2012 than in 2010. However, in reading, the MAS performance was higher in 2012 than in 2010 in both grades across both performance standards.

## Student Performance on the Grade 10 CAPT Modified Assessment System (CAPT MAS)

Of the 2012 total tested CAPT population, 2.4 percent participated in the MAS reading test and 2.6 percent participated in the MAS math test. Students may be assessed with the reading and/or mathematics CAPT MAS. Modifications made to the standard version of the CAPT to create the CAPT MAS included changes to question formats, more accessible presentation of text and graphics, embedded graphic organizers, additional formulas and charts, and scaffolding of multi-step problems.

In 2012, 995 students participated in the CAPT MAS mathematics and 967 students participated in the CAPT MAS reading. Table 19 shows the performance of students on the CAPT MAS from 2010 to 2012. The results show declines over the three-year period in student performance in MAS mathematics with 29.8 percent at or above Proficient and 13.3 percent at or above Goal in 2012. Slight declines were also seen in MAS reading when compared to 2011, although 2012 results show small increases over the baseline year of 2010.

Please note that the increases in the number of MAS test takers between the years 2011 and 2012 are not correlated with increases in the percentage of students at or above Proficiency or the percentage of students at or above Goal on the MAS. This subject remains an area of inquiry for the State Department of Education.

Table 18: Student Performance on CMT and CAPT MAS

| Cohort Years | Cohort <br> Grade <br> Levels | Mathematics - State |  |  |  |  |  | Reading - State |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number <br> Tested | Diff. | \% At/Above <br> Proficiency | Diff. | \% <br> At/Above Goal | Diff. | Number Tested | Diff. | \% At/Above Proficiency | Diff. | \% <br> At/Above Goal | Diff. |
| 2011 |  | 1050 |  | 65.9 |  | 37.3 |  | 1410 |  | 48.8 |  | 30.9 |  |
| 2012 |  | 1203 | 153 | 66.3 | 0.4 | 36.3 | -1 | 1591 | 181 | 47.6 | -1.2 | 30.9 | 0 |
| 2011 | 4 | 1374 |  | 59 |  | 31.3 |  | 1848 |  | 63.4 |  | 32 |  |
| 2012 |  | 1378 | 4 | 63.5 | 4.5 | 32 | 0.7 | 1851 | 3 | 66.7 | -1.2 | 33.7 | 1.7 |
| 2011 |  | 1431 |  | 61.6 |  | 29 |  | 1777 |  | 65 |  | 33.4 |  |
| 2012 |  | 1590 | 159 | 59.9 | -1.7 | 25.1 | -3.9 | 2006 | 229 | 64.1 | -0.9 | 32 | -1.4 |
| 2011 |  | 1538 |  | 62.9 |  | 31.3 |  | 1876 |  | 49.5 |  | 12.6 |  |
| 2012 |  | 1555 | 17 | 60.3 | -2.6 | 28.5 | -2.8 | 1834 | -42 | 47.9 | -1.6 | 14.2 | 1.6 |
| 2011 |  | 1411 |  | 38.1 |  | 17.8 |  | 1610 |  | 58.1 |  | 27.8 |  |
| 2012 |  | 1570 | 159 | 36.2 | -1.9 | 15.2 | -2.6 | 1811 | 201 | 59.5 | 1.4 | 28 | 0.2 |
| 2011 |  | 1320 |  | 38.8 |  | 15 |  | 1425 |  | 63.8 |  | 40.1 |  |
| 2012 |  | 1404 | 84 | 36.6 | -2.2 | 12.5 | -2.5 | 1525 | 100 | 67.9 | 4.1 | 44.5 | 4.4 |
| 2011 |  | 914 |  | 33.4 |  | 15.4 |  | 941 |  | 61.3 |  | 38.4 |  |
| 2012 |  | 995 | 81 | 29.8 | -3.6 | 13.3 | -2.1 | 967 | 26 | 61.2 | -0.1 | 38.2 | -0.2 |

## The CMT and CAPT Skills Checklist

The second alternate assessment in Connecticut's assessment system is the Skills Checklist, which is designed for students with significant cognitive disabilities at each tested grade. The Skills Checklist is completed by the student's primary special education teacher. Judgments are made by the teacher based on observations and interactions with students throughout the year. Three performance standards have also been set for the Skills Checklist: Basic, Proficient, and Independent.

## Student Performance on the Grades 3 and 8 CMT Skills Checklist

This year approximately 1.3 percent of the total tested population in Grades 3 through 8 were administered the CMT Skills Checklist. Table 20 lists the percentage of Skills Checklist examinees from 2006, 2011, and 2012 performing within each of the higher two levels at Grade 3 and Grade 8.

Table 19: CMT Skills Checklist Results

| Year | Number Tested | Grade | Mathematics |  | Reading |  | Communication |  | Science |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | percent <br> Within <br> Proficient Level | percent <br> Within <br> Independent Level | percent <br> Within <br> Proficient <br> Level | percent <br> Within <br> Independent Level | percent <br> Within <br> Proficient <br> Level | percent <br> Within <br> Independent Level | percent <br> within <br> Proficient <br> Level | percent <br> Within <br> Independent Level |
| 2006 | 344 | 3 | 20.3 | 7.0 | 7.8 | 1.7 | 8.1 | 2.0 | NA | NA |
| 2011 | 551 |  | 23.0 | 24.0 | 21.1 | 2.5 | 26.1 | 4.4 | NA | NA |
| 2012 | 556 |  | 24.5 | 24.5 | 21.4 | 4.9 | 26.4 | 6.3 | NA | NA |
| 2006 | 367 | 8 | 6.8 | 3.8 | 10.9 | 2.2 | 16.9 | 3.8 | * | * |
| 2011 | 495 |  | 18.6 | 8.3 | 19.2 | 8.1 | 27.3 | 9.7 | 43.0 | 20.0 |
| 2012 | 556 |  | 24.5 | 7.9 | 21.4 | 7.0 | 27.2 | 10.3 | 45.9 | 17.8 |

*Science was not tested in 2006

## Student Performance on the Grade 10 CAPT Skills Checklist

This year, approximately 1.3 percent of the total tested population of Grade 10 students were assessed with the CAPT Skills Checklist. Table 21 summarizes the CAPT Skills Checklist results from 2007 through 2012. The results show decreases across all four content areas when compared to 2011, although the general trend is upward from the baseline years of 2007 (mathematics, reading and communication) and 2008 (science).

Table 20: 2007-2012 CAPT Skills Checklist Performance Percent At/Above Proficient

| Year | Number <br> Tested | Mathematics <br> percent At/Above <br> Proficient | Reading <br> percent At/Above <br> Proficient | Communication <br> percent At/Above <br> Proficient | Science <br> percent At/Above <br> Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 | 433 | 8.1 | 13.4 | 30.3 | $*$ |
| 2008 | 450 | 12.2 | 17.8 | 38.5 | 44.9 |
| 2009 | 447 | 11.0 | 16.8 | 37.6 | 45.0 |
| 2010 | 506 | 16.0 | 21.2 | 39.8 | 48.6 |
| 2011 | 495 | 16.3 | 24.3 | 43.8 | 50.9 |
| $\mathbf{2 0 1 2}$ | $\mathbf{5 5 2}$ | $\mathbf{1 5 . 0}$ | $\mathbf{2 0 . 9}$ | $\mathbf{4 0 . 2}$ | $\mathbf{4 6 . 6}$ |

* Science was not tested on the CAPT Skills Checklist in 2007.

