

Addition through Subtraction: Are Rising Test Scores in Connecticut School Districts Related to the Exclusion of Students with Disabilities?

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January 2012

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Introduction

In 2009, the percentage of fourth and eighth grade students at or above the proficient level on the Connecticut Mastery Test (CMT) in math and reading showed a sharp increase, after remaining relatively stagnant from 2006 to 2008.¹ This increase continued in 2010, and then leveled off in 2011.² The positive changes on the CMT exceeded those on the National Assessment of Education Progress (NAEP) in 4th grade reading and math.³

In 2009, students with disabilities that districts determined would not have passed the regular CMT in math and/or reading were offered a modified assessment (MAS).⁴ This marked a shift in federal and state policy, which from 2004 until 2008 had required districts to assess students with disabilities on the regular test even when their disability may have prohibited them from reaching the proficient level on the standard CMT.⁵ As a result of the change in policy, the percentage of students taking the regular CMT declined substantially in 2009, on average by three to four percentage points.⁶ Small declines continued in 2010 and 2011.⁷

Importantly, the CT State Department of Education calculates the percentage of students at or above the proficient level by dividing the number of students at or above an identified test cut score point by the total number of students taking the regular CMT, *not* the total number of students served by Connecticut's schools. Before 2009, students who did not reach the proficient level on the CMT because of their disabilities were included in statewide CMT results. In 2009, thousands of low-scoring students were assigned to take the MAS test instead of the standard CMT, and these students were not included in the CMT results. Consequently, comparing proficiency rates from 2004-2008 with proficiency rates from 2009-2011 creates a distorted picture, since the denominator (total number of students taking the regular CMT) changed significantly between 2008 and 2009, from nearly all students--to a population that excluded more than one third of students with disabilities from the standard CMT.

Policymakers in Connecticut rely on standardized test data to assess schools and shape their education agenda. It is critical that the data upon which they rely and the methods used to evaluate the data provide an accurate picture of student progress.⁸ Proficiency rates alone cannot provide an accurate picture of student progress if we do not understand how or whether the rise in proficiency rates beginning in 2009 was related to a shift in testing policy.

Accordingly, this paper examines whether the increase in the percentage of students meeting the proficient level or above on the CMT was in fact related to the exclusion of students with disabilities. It also offers revised proficiency rates that include students taking the MAS, allowing for a more accurate comparison of rates from 2006 through 2011. The paper does *not* examine whether those students selected to take the MAS were appropriately identified, nor does it offer any judgment as to whether or not the MAS is a better assessment of grade-level content knowledge and skills for certain students with disabilities.

Findings

- Using statistical analysis to identify any correlation between the percent of students participating on the standard CMT and the percent of students at or above the proficient level, we found evidence of a *strong association between the declining percentage of all students taking the standard Connecticut Mastery Test and the increasing percent of students at or above the proficient level.*⁹ In other words, across school districts, as more students with disabilities were excluded from score results, a greater percentage of students were reported as reaching the proficient level.
- When we include students with disabilities that took the modified assessment (MAS) in reading and math in 2009-2011 in the total sample of 4th and 8th grade test-takers in each year, then the revised percentages of students at or above the proficient level would be *two to three percentage points lower than the state reported.*¹⁰ Notably, even after revision, there do appear to be positive changes in percent at or above the proficient level from year to year, though these changes are not as large as they appear prior to revision.¹¹ In other words, Connecticut experienced higher percentages of students at or above proficient in the 4th and 8th grade between 2008 and 2011, but not to the degree that the state initially reported.
- Statewide improvements in standard Connecticut Mastery Test (CMT) scores reported by the Connecticut State Department of Education (SDE) between 2008 and 2009 -- the period of the largest reported gains -- were largely the result of the exclusion of students with disabilities from these standard test results, rather than overall improvements. For example, 84% of the reported improvement in 4th grade math proficiency between 2008 and 2009 and 69% of the improvement in 8th grade reading proficiency could be attributed to the exclusion of these students. Much of the reported improvements in later years could also be attributed to this exclusion, though there were some modest overall gains as well.
- The percentage of students with disabilities who were assigned to take the MAS rather than the standard CMT varied substantially across school districts, from 0% to 12.8%. Most districts had some participation on the modified assessment that affected their test score data.

Background

From 2000 to 2004, students with disabilities were increasingly required to take the standard CMT because of federal testing requirements under the No Child Left Behind Act.¹² The disabilities for these students vary widely and can include, but are not limited to, a learning disability, speech/language impairment, emotional disturbance, autism, or other health impairment.¹³

Out-of-level tests were phased out for students with disabilities by 2004. Between 2004 and 2008, nearly all students participated in the standard CMT. During this period, the only exclusions from the standard CMT calculations were as follows: students absent on the day of test administration, language minority students with an ELL exemption, a limited number of students with severe disabilities that took the Skills Checklist¹⁴, or students with no valid score on the test.

However, in 2007 the federal government changed its policy and regulations for states regarding students with disabilities and standardized testing, allowing more students to be excluded from the state standardized test.¹⁵ In response, Connecticut piloted a modified assessment system (MAS) for students with disabilities in math and reading in 2009 (but **not** in writing). The purpose of the MAS

was to obtain a valid and accurate understanding of the grade-level content knowledge and skills of students with disabilities when the standard test inhibited such assessment.¹⁶ **Only students with disabilities that districts determined would *not* pass the standard CMT because of their disabilities were selected by districts in Connecticut to take the MAS in reading and/or math.**¹⁷ Students with disabilities that took the MAS in reading and/or math were counted **separately** from their non-disabled peers in calculations for the percentage of students at or above the proficient level, participation, and average scale scores.¹⁸

The modified assessment (MAS) is a separate grade-level test with important differences from the standard CMT. For example, the CMT modified assessment (MAS) in reading is taken online with a computer rather than the traditional paper and pencil test.¹⁹ Other modifications on the MAS test include: different typefaces, removed distractors, fewer items on a page, graphic organizers, key text underlined and/or bolded, larger font size, simplified graphics, and simplified language.²⁰ Because of these modifications, we recognize that the MAS may be a better assessment of skills for students with disabilities than the standard CMT.

However, as a result of this shift in policy, overall participation on the standard CMT in math and reading declined in the state from 2009 through 2011 (though not in writing, the subject area in which no MAS was offered). Simultaneously, from 2009-2011, the percentage of students in the state meeting the proficient level or above on the CMT in math and reading appeared to increase more quickly than in the previous three years. Average scale scores, a normative indicator, on the CMT in math and reading also appeared to rise more quickly after 2008.²¹

Methodology

The purpose of this paper is to determine whether a shift in the participation of students with disabilities from the standard CMT to the modified assessment system (MAS) influenced the percentage of students scoring at or above the proficient level. In order to examine the connection between the declining participation of students and resulting increases in the percentage of students at or above the proficient level in Connecticut we took the following steps:

- a. Describe participation rates in the 4th and 8th grade for students taking the standard CMT in the school years 2005-2006 through 2010-2011.²²
- b. Identify the shift in participation of students with disabilities from taking the standard CMT to the modified assessment.
- c. Describe the change in the percentage of students in the 4th and 8th grade at or above the proficient level and changes in average scale scores on the CMT before and after the modified assessment system (MAS) began in Connecticut.
- d. Demonstrate the association between participation rates and the percentage of students at or above the proficient level from 2006-2011 by evaluating the statistical relationship between these variables (calculating Pearson's *r* correlation coefficient).
- e. Recalculate the percentage of students at or above the proficient level on the standard CMT by re-introducing students with disabilities that took the modified assessment system (MAS) into the calculations for students at or above the proficient level. When we included students taking the MAS in the revised calculations we included them as scoring at basic or below basic on the standard CMT for individual districts and the state in math and reading.²³

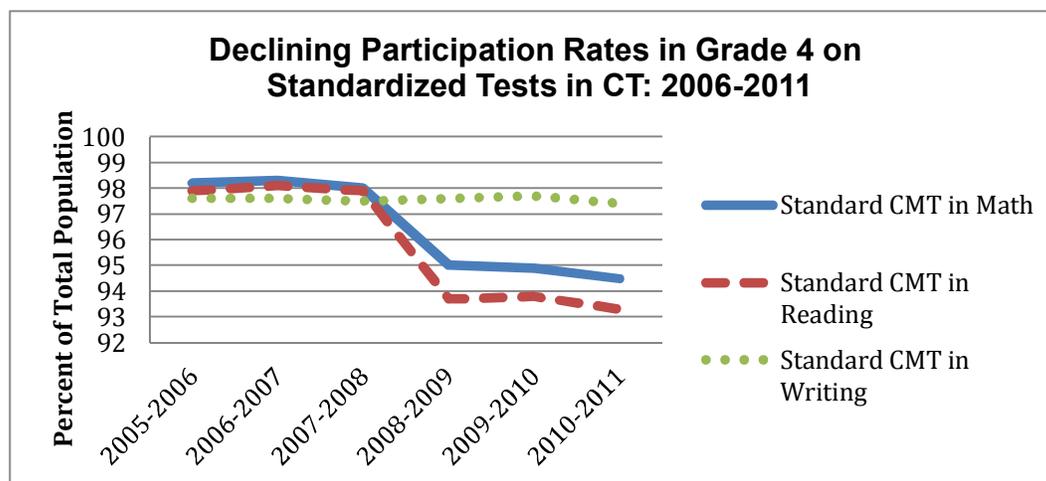
Participation Rates on the Connecticut Mastery Test: 2006-2011

Participation rates for all students were stable from 2006 to 2008 for the 4th and 8th grade standard CMT, then declined in math and reading (but not in writing) beginning in 2009. This shift in participation was the result of a change in federal policy that allowed states to offer students with disabilities a modified assessment.

When the CMT 4th edition began in 2006, 98.2% of all 4th grade students in the state participated in the standard CMT in math (see Figure 1).²⁴ In 2007 and 2008, the participation rates for the standard CMT in 4th grade math were 98.3% and 98% respectively.²⁵ The participation of 8th grade students on the standard CMT in math moved slightly from 97.4% in 2006 to 97.6% in 2008.²⁶

Between 2008 and 2009, there was a substantial decline in the participation rate of all 4th grade students taking the standard CMT in math, from 98% to 95%.²⁷ The participation of 8th grade students on the standard CMT in math also declined substantially between 2008 and 2009, from 97.6% to 95.1%.²⁸ Participation on the standard CMT in reading exhibited similar declines in the 4th and 8th grade during this period.

Figure 1



Source: eMetric, *Data Interaction for CMT 4th Edition*, CT State Department of Education, 2011.

From 2009-2011, declines in the percentage of all students participating on the standard CMT in math and reading continued, though at a slower pace. By 2011, fewer than 95% of all 4th and 8th graders in the state took the standard CMT in math and reading.²⁹

Students with disabilities participating in the MAS in 4th grade reading and math made up 4.5% and 3.4% respectively of the state's total population (n=41,266) in 2011.³⁰ In 2011, only 52.5% of all 4th grade students with disabilities in the state took the standard CMT in reading.³¹ In contrast, 99% of all non-disabled 4th grade students took the standard CMT in reading.³²

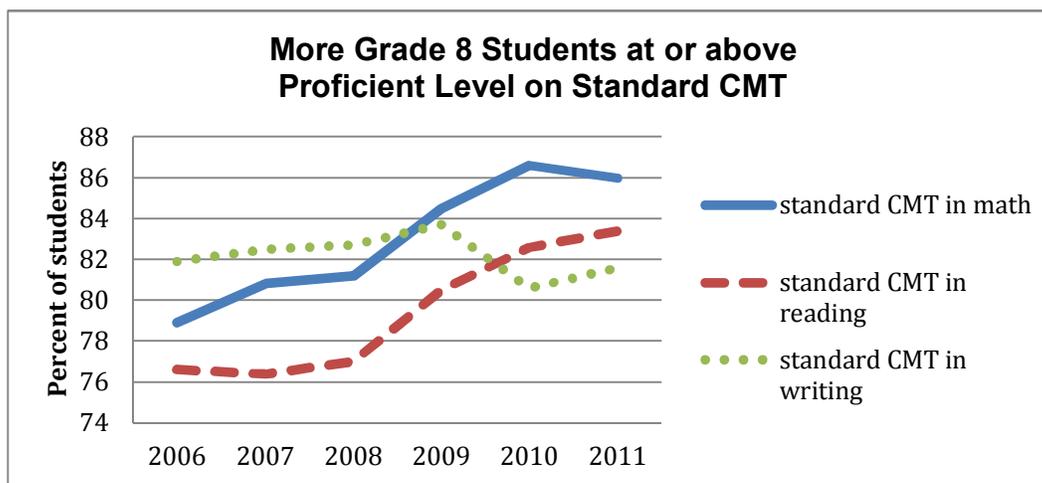
In comparison to math and reading, participation rates on the 4th and 8th grade standard CMT in writing remained relatively steady from 2006 to 2011.³³ The stability of participation rates on the

writing CMT is as expected, given that the state did not offer a modified assessment (MAS) for the CMT in writing. Although students with disabilities were allowed accommodations based on their Individualized Education Program (IEP),³⁴ such as extra time, these students *were* counted in test score calculations, unlike students taking the MAS in math and reading.

Increasing Percentage of Students At or Above the Proficient Level and Average Scale Scores on the Connecticut Mastery Test: 2006 to 2011

Using a year-to-year comparison, the percentage of students at or above the proficient level on the 4th and 8th grade standardized CMT in math, reading, and writing did not fluctuate up or down more than 2.5 percentage points from 2006 to 2008.³⁵ For example, in 2006, the percentage of all students at or above the proficient level on the 4th grade standard CMT in math was 80.3%;³⁶ in 2008, the proficiency rate was 81.5%.³⁷ In 2006, the percentage of all students at or above the proficient level for the 4th grade standard CMT in reading was 71.8%; and in 2008 the proficiency rate was 69.7%.³⁸

Figure 2



Source: eMetric, *Data Interaction for CMT 4th Edition*, CT State Department of Education, 2011.

Starting in 2009, however, the percentage of students at or above the proficient level on the 4th and 8th grade CMT in math and reading appeared to increase sharply as compared to 2008. The percentage of 4th grade students that scored at or above the proficient level on the standard CMT in math appeared to increase from **81.5% in 2008 to 84.6% in 2009**;³⁹ on the standard 4th grade CMT in reading, proficiency rates appeared to increase from **69.7% in 2008 to 74.4% in 2009**.⁴⁰

State reports suggested a similar positive change from 2008 to 2009 on the 8th grade standard CMT in reading and math (see Figure 2). For example, the percentage of 8th grade students that scored at or above the proficient level on the standard CMT in reading appeared to increase from **77% in 2008 to 80.5% in 2009**.⁴¹

In general, the percent of students at or above the proficient level on the 4th and 8th grade standard CMT in math and reading also appeared to increase from 2009 to 2010, and then leveled off in 2011. For example, the percent of students scoring at or above the proficient level on the 4th grade standard CMT in math appeared to improve from 84.6% in 2009 to 85.2% in 2010. On the 8th grade

standard CMT in math, the percent of students at or above the proficient level appeared to increase from 84.5% in 2009 to 86.6% in 2010.

4th grade reading was the exception to this trend. On the 4th grade standard CMT in reading, the percent of students at or above the proficient level appeared to decline from 2009 to 2010.⁴²

The percentage of students at or above the proficient level for the 4th and 8th grade standard CMT in writing (for which no MAS was offered) remained relatively flat from 2006 to 2011, with some small positive increases (smaller than the increases noted in math and reading). For example, the percentage of students scoring at or above proficient on the 4th grade standard CMT in writing increased from 84.8% in 2008 to 85% in 2009; to 86.5% in 2010, and then down to 85.4% in 2011.⁴³ The percent of students at or above the proficient level for the 8th grade standard CMT in writing was 81.6% in 2011 compared to 81.9% in 2006.⁴⁴

A similar pattern occurred with average scale scores. Average scale scores on the 4th and 8th grade standard CMT in *math* had positive changes from 2006 – 2008. However, when participation rates were stable or increasing, the average scale scores on the 4th and 8th grade standard CMT in *reading* appeared to decline slightly from 2006 – 2008. For example, in 2006 the average scale score for the 8th grade standard CMT in reading was 249.7.⁴⁵ In 2008, the average scale score for 8th grade students was 247.6 out of a scale of 100 to 400 on the standard CMT in reading.

Average scale scores on the 4th and 8th grade standard CMT in reading then experienced an abrupt positive increase in 2009.⁴⁶ After remaining stagnant for two years, there was a positive change of 8th grade average scale score in math between 2008 -2009.⁴⁷ (4th grade math also appeared to increase as it had in previous years) For example, the average scale score on the 8th grade standard CMT in math was 255.7 in 2007. There was slight negative change in 2008 when the average scale score was 255.4. When the MAS began, the average scale score was 260.3 in 2009 and then 264.4 in 2010.⁴⁸

From 2010 to 2011, there appeared to be little change in average scale scores on the standard CMT in math, and a slight positive change in reading, for the 4th and 8th grade. For instance, the average scale score in 8th grade math was 264.0 in 2011, which was lower than in 2010.⁴⁹

The Relationship Between Participation, Average Scale Scores, and Proficiency Rates

We used a statistical analysis (Pearson's *r*) to identify any correlation between the percent of students participating (*x*) on the standard CMT and the percent of students at or above the proficient level (*y*) using the six years of test data between 2006 and 2011 (*n*=6).⁵⁰ In order to simulate the method of demonstrating “progress” according to No Child Left Behind, we compared data from the same grade level, but with different student cohorts each year (i.e. 4th grade in 2008 compared to 4th grade in 2009).

The larger the correlation, the stronger the positive or negative association between two variables. A correlation of “0” would indicate that there is no association between the variables. A positive correlation of “1” is a perfect association – i.e., as one variable increases, so does the other, precisely in step. In a negative correlation, as one variable increases, the other declines (see Figure 3). Correlation in itself does not prove causation. However, this statistical analysis is one method of determining whether or not there is a relationship between two indicators across many school districts.

Figure 3:

A Guide to Strength of Correlation

Strength of Correlation (Effect Size)	Positive	Negative
Small	0.1 – 0.29	-0.1 – -0.29
Medium	0.30 – 0.49	-0.30 – -0.49
Large	0.50 – 1.0	-0.50 – -1.0

Source: Adapted from Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Mahwah, NJ: Erlbaum

We found a large statistical correlation between declining participation on the standard CMTs in math and reading with the increasing percentage of students at or above the proficient level on those tests for both 4th and 8th grade on the standard CMT in math and reading. The large negative correlation indicates that as participation went “down” there was a strong relationship to the percent proficient that went “up”. The negative correlation also suggests that when, at times, participation went “up”, then proficiency rates “declined” simultaneously. Participation and the percent of students at or above proficient had an inverse relationship.

Specifically: on the 4th grade standard CMT, there was a very strong negative correlation ($r = -0.987$) between percent of students participating on the test and the percent of students at or above the proficient level for math and a strong negative correlation ($r = -0.908$) for reading.⁵¹ Average scale scores in 4th grade also had a strong negative correlation to the participation rate in reading ($r = -0.965$) and math ($r = -0.929$).⁵²

On the 8th grade standard CMT there was a strong negative correlation ($r = -0.925$) between percent of students participating on the test and the percent of students at or above the proficient level for math and a strong negative correlation ($r = -0.969$) for reading.⁵³ Average scale scores in 8th grade also had a strong negative correlation to the participation rate in reading ($r = -0.856$) and math ($r = -0.917$).⁵⁴

There was no statistically significant correlation between the percent of students at or above the proficient level and participation rates on the 4th and 8th grade standard CMT in writing.⁵⁵ Importantly, **there was no modified assessment (MAS) for writing** and participation rates did not change in the same way as math and reading.

In math and reading, these correlation statistics offer evidence of a strong connection between the declining percentage of all students taking the standard Connecticut Mastery Test and the increasing percent of students at or above the proficient level. These correlations also indicate an association between the instances in the data set when participation went up, and proficiency rates went down.

The decreasing percentage of students with disabilities participating on the standard CMT did not entirely cause an increase to the percent at or above the proficient level, but the two were strongly related. The high correlation statistics between the percent of students at or above the proficient level and participation rates for the standard CMT in math and reading indicate the strong possibility that shifting participation rates distorted at least two test indicators—the percent at or above the proficient level and average scale score.

Recalculating Percent At or Above the Proficient Level, Statewide

In order for students to take the MAS, districts needed to demonstrate in a Planning and Placement Team (PPT) meeting for potential students that they would score at the basic or below basic level on the CMT in math and/or reading because of their disability.⁵⁶ Therefore, we can recalculate the percentage of all students at or above the proficient level on the standard CMT in math and reading by including students that took the MAS as *not proficient* after 2009. We can accordingly determine a revised percentage of students at or above the proficient level that can be compared against percentages from 2004 to 2008, and can better enable us to assess trends in students test scores across those years.

The state calculates the percent at or above the proficient level by dividing the number of students at or above the proficient level (numerator) by the total number of students taking the test (denominator), then changing this decimal into a percent by multiplying by 100. Our calculation (see Figure 4) includes the students that took the MAS in each subject test into the sample of students taking the test while keeping the same number of students at or above the proficient level.

Figure 4:

Formula to Revise Proficiency Level

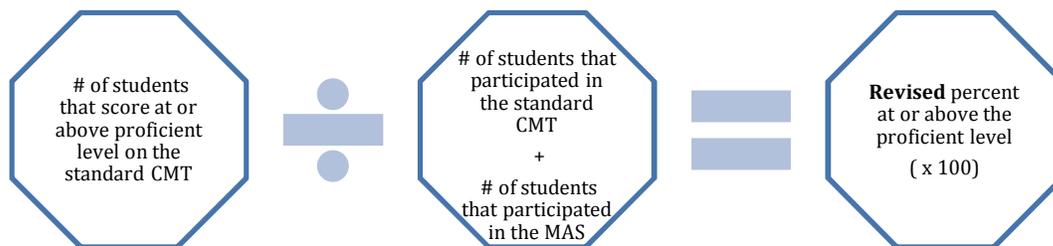
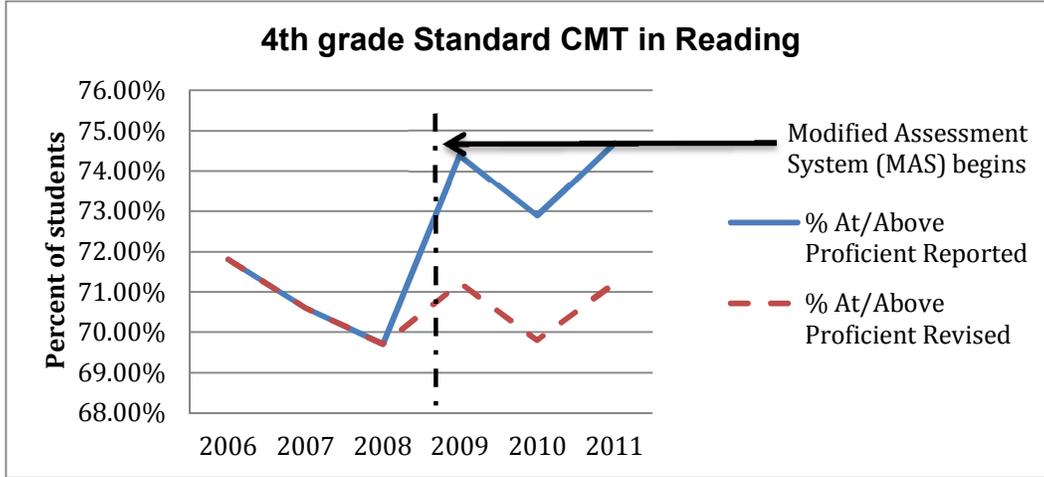


Figure 5 provides a comparison between reported and revised percent of students at or above the proficient level from 2006 – 2011 on the 4th grade standard CMT in reading. The percent of students at or above the proficient level on the 4th grade standard CMT in reading was **71.8% in 2006** (students with disabilities were included in results during this period).

In 2011, the **reported** percent of students at or above the proficient level on the 4th grade standard CMT in reading was **74.7%**. However, when we include the 1,875 students that took the modified assessment (MAS) in reading into the sample of test-takers as not proficient, then the **revised** percent of students at or above the proficient level would be **71.23% in 2011**.⁵⁷ (See figure 5)

Figure 5



Source: eMetric, *Data Interaction for CMT 4th Edition*, CT State Department of Education, 2011.⁵⁸

If we include students with disabilities that took the MAS in reading and math in 2009 - 2011 in the total sample of 4th and 8th grade test-takers in each year, then the revised percentages of students at or above the proficient level would be **two to three percentage points lower than the state reported.**⁵⁹ The changes in percent at or above proficient on the standard CMT between 2008 - 2009 and 2010 - 2011 are reduced when we revise this indicator by including students with disabilities that took the MAS.

Notably, even after revision by including the numbers of students taking the MAS, there *do* appear to be positive changes in percent at or above the proficient level from year to year, though of a lesser magnitude than pre-revision.⁶⁰ For example, the state reported that 86% of students were at or above the proficient level on the 8th grade standard CMT in math. If we introduce the 1,374 students that participated on the MAS in math back into the sample, then the percent of students that were at or above the proficient level on the 8th grade standard CMT in math would be 83.2%. In comparison, 78.9% of all 8th grade students were at or above the proficient level on the standard CMT in 2006.

The distortion caused by the MAS not only influenced the percent at or above the proficient level, but they affected the *changes*, or gains, from year to year in the same grade. Statewide improvements in standard Connecticut Mastery Test (CMT) scores reported by the Connecticut State Department of Education (SDE) between 2008 and 2009 -- the period of the largest reported gains -- were largely the result of the exclusion of students with disabilities from these standard test results. For example, as Figure 6 shows, 84% of the reported *change* in percentage at or above proficient for 4th grade math between 2008 and 2009, and 69% of the *change* in percent at or above proficient for 8th grade reading could be attributed to the exclusion of these students (see Figure 6).

Between 2009 and 2010, exclusions through the MAS had a minor role in the *change* of percent at or above proficient after the proficiency rates were adjusted to include students with disabilities. A portion of the reported “improvements” from 2010 to 2011 could also be attributed to this exclusion, though there were some modest overall changes that were related to other factors as well.

Figure 6

Reported and Revised Change in Percent at/above Proficient: Standard CMT 2008 – 2009

	State <i>reported</i> change from 2008 to 2009 (percentage points)	<i>Revised</i> change from 2008 to 2009, adjusting for the exclusion of students with disabilities that took the MAS (percentage points)	Portion of change that is due to excluding students with disabilities that took the MAS (percent)
4 th grade reading	4.7	1.5	68%
4 th grade math	3.1	0.5	84%
8 th grade reading	3.5	1.1	69%
8 th grade math	3.3	1.1	67%

Source: eMetric, Data Interaction for CMT 4th Edition, CT State Department of Education, 2011.⁶¹

Recalculating Percent At or Above the Proficient Level, District by District:

Individual districts ranged widely in the percentage of all students taking the modified assessment (MAS). The percentage of all students participating in the 4th grade modified assessment (MAS) in math in each district ranged from zero to 11.3% of all students.⁶² On the 4th grade modified assessment (MAS) in reading, the range of all students in participating was zero to 12.8% of all students in a district.⁶³ Participation on the 8th grade modified assessment (MAS) in math ranged from zero to 9.3% of all students in a district.⁶⁴ The range of participation on the 8th grade modified assessment (MAS) in reading was zero to 9.9% of all students in a district.⁶⁵

The geographic concentration of participation on the modified assessment (MAS) is notable. For example, 60% of all students with disabilities with a valid score on the 4th grade modified assessment (MAS) in reading came from only 18 districts in the state.⁶⁶ On the other hand, several districts had no students on the modified assessment in 4th or 8th grade math and reading such as Lebanon and Regional School District 18. Nevertheless, most districts had at least minor participation on the modified assessment (MAS) in the 4th and 8th grade that affected their test score data.

Because of the uneven distribution of students with disabilities and participation on the MAS, the percentages of students at or above the proficient level on the standard CMT were also unevenly impacted (see Figure 7). School districts with larger declines in participation because of placing students with disabilities on the modified assessment (MAS) were more likely to experience an increase in the percent at or above the proficient level on the standard CMT in math and reading, but not writing.

For instance, Fairfield placed 1.8% of 8th graders on the MAS in math, while the Bridgeport district placed 4%, and New Haven placed 8.7%.⁶⁷ Accordingly, revision of the percent at or above the proficient level to include students taking the MAS affects New Haven more strongly than Bridgeport, and Bridgeport more strongly than Fairfield. The revised percentage of students at or above the proficient level for the 8th grade standard CMT in math for each district are as follows:

Figure 7

Reported and Revised Percent at or above the Proficient Level for 8th Grade Math

Selected District (town)	Percent (%) of Students Who Took Modified Assessment (MAS) in Math	Reported Percent (%) at or Above the Proficient Level	Revised Percent (%) at or Above the Proficient Level – Including Students with disabilities
Fairfield	1.8%	97.0%	95.2%
Bridgeport	4.0%	60.7%	58.1%
New Haven	8.7%	69.2%	62.9%

*Source: eMetric, Data Interaction for CMT 4th Edition, CT State Department of Education, 2011.*⁶⁸

These revisions further demonstrate the disproportionate impact on districts of changing participation rates caused by students with disabilities taking the modified assessment (MAS). We include reported and revised percentages of students at or above the proficient level for each district in 2011 on the standard CMT in math and reading for the 4th and 8th grade in Appendix F and G.

Conclusion

In 2009, the same year that the MAS was introduced, then-Commissioner of Education Mark McQuillan stated:

I am pleased to see improvement in the performance of students across the board, including somewhat larger gains by minority and economically disadvantaged students which helps to close Connecticut’s large achievement gaps.⁶⁹

Although our analysis shows that there *were* positive changes from 2008 to 2009, the Commissioner’s impression of the extent of these changes was distorted. Connecticut Mastery Test average scale scores and percent at or above proficient level calculations were impacted by a change in the sample of students that was assessed, or a “compositional effect”. As our analysis shows, the rise in the percent at or above the proficient level on the CMT was strongly correlated with the changes in participation that occurred simultaneously. In order to assess trends in standardized test scores more carefully from 2004 through 2011, the percentages of students at or above the proficient level from 2009-2011 must be re-calculated so that those students taking the MAS are included in the total population under consideration, just as they were from 2004-2008. This recalculation will improve the ability to make comparisons across years and provide an undistorted picture of trends in standardized test data.

In addition to the distortion of CMT indicators, there was a discrepancy between changes on the National Assessment of Educational Progress (NAEP) from 2007 to 2009. Our analysis could help to explain why results on the Connecticut Mastery Test (CMT) showed greater positive changes than on the NAEP between 2007 and 2009 in 4th grade reading and math. Presumably, *all* subgroups of students participated on the NAEP sample between 2007 and 2009, but *not all* students were required to take the standard CMT in 2009.⁷⁰ Simply put, improvement on the CMT may have looked greater than the NAEP because a smaller portion of lower-scoring students took the CMT in 2009 than the NAEP.⁷¹ The discrepancy between the CMT and NAEP is consistent with our

analysis and bolsters the need for further inquiry into the results of the MAS exclusions before consequential decisions are made based upon the CMT results.

We further believe that our analysis opens the door to other questions that are worthy of separate investigation, including:

- 1) To what extent did certain subgroups, including racial and ethnic minorities, low-income, and male or female students, participate on the modified assessment system?
- 2) Given that decreased participation is correlated with increases in percent of students at or above the proficient level and that decisions regarding resources and, at times, a school's continued existence⁷², are related to proficiency rates, schools would seem to have a clear incentive to minimize the number of children taking the standard CMT. Is there in fact any evidence that schools are over-identifying students eligible for the MAS?
- 3) Given that students taking the MAS are not counted in the proficiency rate calculation, and given the important decisions related to proficiency rates, schools would seem to have a clear incentive to concentrate resources on those students taking the standard CMT.⁷³ There is some evidence of resource diversion away from special education in at least one district in Connecticut.⁷⁴ Is there any evidence that resources are, in fact, being concentrated on students taking the standard CMT, *to the detriment of those designated to take the MAS*?
- 4) How can public schools authentically assess student learning and well-being without creating incentives to exclude or hurt vulnerable student populations such as students with disabilities, language minority (ELL), low-income, and racial or ethnic minorities?

This paper does not entirely address or answer these questions, but we believe they are important issues that must be considered as we move forward in our state with changes to public education. As first steps, we recommend that the State Department of Education and state policymakers:

1. *Clearly explain the impact of the modified assessment system and the exclusion of students with disabilities on the results of the standard CMT in math and reading when reporting on trends over time.*
2. *Carefully monitor the modified assessment system (MAS) to ensure appropriate selection of students and implementation.*
3. *Use a variety of indicators, both quantitative and qualitative, to assess the progress of public education rather than a single-measure system based on standardized tests that may create a distorted picture of student learning, such as proficiency rates.*
4. *Reconsider and modify policies that assign "rewards" and "punishments" based on standardized test scores, thus reducing the incentives associated with such systems to exclude students from participation such as students with disabilities and other vulnerable populations.⁷⁵*

Ultimately, the goal of this paper is simple. By describing changes in participation rates and recalculating the percentage of students at or above the proficient level for the state in math and reading, we hope to build awareness and encourage discussion about the need to ensure that standardized test data are presented in such a way, along with other qualitative and quantitative data, as to tell an accurate story about student learning. As it stands, standardized test data are used to claim improvement, allocate resources, indicate quality, and promote equity in public education. If the test data are presented in such a way that the story it tells is distorted, our policy choices will likewise be misguided.

Appendices

Appendix A: Grade 4 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 3rd edition from 2000-2004

Appendix B: Grade 8 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 3rd edition from 2000-2004

Appendix C: Grade 4 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 4th edition from 2006-2011

Appendix D: Grade 8 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 4th edition from 2006-2011

Appendix E: Grade 4 and Grade 8 Reported and Recalculated Percent At or Above the Proficient Level in the State on the Standard CMT in 2006-2011

Appendix F: Grade 4 Reported and Recalculated Percent At or Above the Proficient Level by District for the Standard CMT in Math and Reading 2011

Appendix G: Grade 8 Reported and Recalculated Percent At or Above the Proficient Level by District for the Standard CMT in Math and Reading 2011

Appendix H: Figure 9-Participation Rates in Grade 8 on Standardized Tests in CT: 2006-2011

¹ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. “2009 Overall Summary Report.” CT Department of Education, 2011. Web. 1 Aug. 2011. *See* Appendix C and D for 4th and 8th grade average scale scores on the standard CMT in reading, writing, and math from 2006-2011.

² *See* Appendix C and D

³ Bandeira de Mello, V. (2011) “Mapping State Proficiency Standards Onto the NAEP Scales: Variation and Change in State Standards for Reading and Mathematics, 2005-2009”. (NCES 2011-458). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC; Government Printing Office: page 25-26. Web. 6 Oct. 2011. <<http://nces.ed.gov/nationsreportcard/pdf/studies/2011458.pdf>>

⁴ Connecticut State Department of Education. *PPT Process and IEP Forms*. “CMT/CAPT (Modified Assessment System-MAS) PPT Eligibility Worksheet.” Connecticut State Department of Education. Web. 15 Aug. 2011. <http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Special/MAS_eligibility_worksheet.pdf>.

⁵ Lazarus, Sheryl S. and Thurlow, Martha L. “The Changing Landscape of Alternate Assessments Based on Modified Academic Achievement Standards: An Analysis of Early Adopters of AA-MAS.” *Peabody Journal of Education: Issues of Leadership, Policy, and Organizations* (2009): Vol. 84, No. 4: 496-510. Web. 27 Sept. 2011. *See* increasing participation rates in Appendix A and B from 2000 to 2004. Also *see* Appendix C and D for stable participation rates from 2006-2008.

⁶ *See* Appendix C and D

⁷ *See* Appendix C and D

⁸ Koretz, Daniel. *Measuring Up: What Educational Testing Really Tells Us*. Cambridge, MA: Harvard University Press, 2009. Print. See page 69. Also See Ho, Andrew Dean. "The Problem With "Proficiency: Limitations of Statistics and Policy Under No Child Left Behind." *Educational Researcher*, Vol. 37, No. 6 (2008): pp. 351-360. Web. 27 Sept. 2011. Testing experts such as Dr. Koretz have noted that the method of comparing percent proficient from one year to the next in the same grade with different cohorts has been used for its simplicity, but it has had many shortcomings. For example, sudden demographic changes can change the percent at or above proficient rates. Dr. Ho notes that using the "proficient" level also has shortcomings for educational statistics, reporting, and management.

⁹ We calculated Pearson's *r* to identify any association between percent at or above proficient and the percent participation on the standard CMT in math, reading, and writing between the years 2006 and 2011. We compared these statistics in the same grade over the five years to simulate the method used by the No Child Behind Act. Precisely, there was a strong inverse, or negative correlation, between percent at or above proficient and the percent participation during these years. This data set included several instances when participation went "up" and the percent at or above proficient went "down."

¹⁰ See Appendix E for a recalculated percentage of students at or above the proficient level on the standard CMT in math and reading from 2009 - 2011 in 4th and 8th grade for the state. Note that the recalculations for 2009 are based on an estimated number of students taking the modified assessment on the MAS pilot. The state did not report the 2009 pilot MAS data.

¹¹ See Appendix H and I for year over year percentage of students at or above the proficient level in selected subgroups.

¹² See Appendix A and B for participation rates, average scale scores, and the percent of students at or above the proficient level between 2000 and 2004. Also see Minnema, J., & Thurlow, M. (2003). "Reporting Out-of-level test scores: Are these students included in accountability programs?" (Out-of-Level Testing Project Report 10). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Web. 30 Oct. 2011. <<http://www.cehd.umn.edu/NCEO/onlinepubs/OOLT10.html>>

¹³ In 2010-2011, the Connecticut State Department of Education reported that there were 63,486 students in special education and separated them in the following categories: learning disabilities (33.3%), speech language impairment (18.6%), other health impairment (18.4%), autism (9.2%), emotional disturbance (8.4%), multiple disabilities (4.2%), intellectually disabled (3.9%), developmental delay for ages 3-5 only (2.4%), hearing impairment (1%), visual impairment (0.3%), traumatic brain injury (0.2%), orthopedic impairment (0.1%), deaf/blindness (0). See Connecticut State Department of Education. *Connecticut Education Data and Research (CEDaR) Data Tables*. "Special Education – Students With Disabilities Grades K-12 By Disability Category-2010-2011." CT Department of Education, 2011. Web. 20 Jan. 2012.

¹⁴ Participation on the Skills Checklist for students with severe disabilities ranged from 0.8% to 1.3% of all students in the 4th and 8th grade. Participation on this alternate assessment appears to have also increased slightly from 2006-2011. See reports from 2006-2011 at eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. "Overall Summary Report." CT Department of Education, 2011. Web. 1 Aug. 2011.

¹⁵ United States. Department of Education. Office of Elementary and Secondary Education, Office of Special Education and Rehabilitative Services. "Part IV, 34 CFR Parts 200 and 300, Title I-Improving the Academic Achievement of the Disadvantaged; Individuals With Disabilities Education Act (IDEA)-Assistance to States for the Education of Children With Disabilities: Final Rule." *Federal Register*. Vol. 72, no. 67. 9 April 2007: 17748-17781. Web. 20 November 2011. <<http://www.eric.ed.gov:80/PDFS/ED496143.pdf>> New regulations and guidance steps were developed in order for Title I of the Elementary and Secondary Education Act (NCLB) to comply with Part B of the Individuals with Disabilities Education Act. Also See the non-regulatory guidance from July 20, 2007, "Additional Title I Provisions Included in the Regulations Package on Modified Academic Achievement Standards Published in the Federal Register on April 9, 2007".

¹⁶ The MAS has important differences from the standard CMT. For example, the CMT MAS in reading is taken online with a computer rather than the traditional paper and pencil test. Other modifications on the MAS include: different typefaces, distractors removed, fewer items on a page, graphic organizers, key text underlined and/or bolded, larger font size, simplified graphics, and simplified language. Hodgson, J. R., Lazarus, S. S., & Thurlow, M. L. (2010). "Characteristics of states' alternate assessments based on modified academic achievement standards in 2009-2010." Synthesis Report 80. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Web. 27 Sept. 2011. See Table B2 and B5, pg. 35. <<http://www.cehd.umn.edu/NCEO/onlinepubs/Synthesis80/Synthesis80.pdf>>

¹⁷ Connecticut State Department of Education. *PPT Process and IEP Forms*. "CMT/CAPT (Modified Assessment System-MAS) PPT Eligibility Worksheet." Connecticut State Department of Education. Web. 15 Aug. 2011. <http://www.sde.ct.gov/sde/lib/sde/PDF/DEPS/Special/MAS_eligibility_worksheet.pdf> Along with the worksheet,

districts needed to provide evidence that a student would not meet or exceed the proficient level on the standard CMT in math and/or reading.

¹⁸ Lazarus, Sheryl S. and Thurlow, Martha L. "The Changing Landscape of Alternate Assessments Based on Modified Academic Achievement Standards: An Analysis of Early Adopters of AA-MAS." *Peabody Journal of Education: Issues of Leadership, Policy, and Organizations* (2009): Vol. 84, No. 4: 496-510. Web. 27 Sept. 2011. Connecticut was one of the nine states that adopted a modified assessment soon after the federal rules changed in 2007. Of those nine states, Connecticut was one of six that had out-of-level testing early in the decade for students with disabilities.

¹⁹ Hodgson, J. R., Lazarus, S. S., & Thurlow, M. L. (2010). "Characteristics of states' alternate assessments based on modified academic achievement standards in 2009-2010." Synthesis Report 80. Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Web. 27 Sept. 2011. See Table B5, pg. 35.

<<http://www.cehd.umn.edu/NCEO/onlinepubs/Synthesis80/Synthesis80.pdf>>

²⁰ Hodgson, Lazarus, and Thurlow 25. See Table B2.

²¹ We focus on the percent at or above the proficient level in order to demonstrate the practical implications of changing participation rates. This indicator is used for NCLB and local test-based management purposes. The proficient level is a more important indicator than goal level because the NCLB Act uses the proficient level to determine whether schools and districts make Annual Yearly Progress (AYP). In order to corroborate the proficient level data, we also include the average scale scores for the CMT in reading, writing, and math for the years 2006-2011. The Connecticut Mastery Test calculates a scale score between 100 and 400 for each student on the math, reading, and writing tests then reports an average of those scale scores by subgroup, school, district, and the state. Scale scores are used to report where students are within a distribution of results.

²² Connecticut's school year begins in August or September, depending on the individual district, and ends in June of the next calendar year. The Connecticut Mastery Test 4th edition is administered in March for the 3rd through 8th grade.

²³ Howley, Eileen and Ward, Chip. "Connecticut Mastery Test (CMT) and Connecticut Academic Performance Test (CAPT) Results." *Report to the Board of Education*. 15 Sept. 2009. West Hartford, CT: West Hartford Public Schools, 8. Web. 1 Sept. 2011. <<http://www.whps.org/board/agenda-documents/20090915/VB1%20CMT,%20CAPT.pdf>>

Assistant Superintendent of Curriculum and Instruction Eileen Howley used a similar approach for recalculating the percentage of students at or above the proficient level on the standard CMT in math and reading for the West Hartford Public Schools district in 2009. Assistant Superintendent Howley noted, "The MAS was taken by the lowest performing special education students-those who had taken the CMT/CAPT in previous years had typically not reached the proficient level in that subject. The results of the MAS pilot were not incorporated in the state reported CMT and CAPT results for 2009. As a consequence reported scores increased in reading and math compared to 2008 when all students took the regular CMT and CAPT test. In West Hartford 2.6% of all students tested took the MAS in mathematics and 3.7% of students tested took the MAS in reading. Presuming none of the MAS students would have reached mastery, simply excluding these students increased the math scores by 2.0% and the reading scores by 2.8% compared to 2008 results."

²⁴eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. "2006 Connecticut Mastery Test Participation Rate Report." CT Department of Education, 2011. Web. 1 Aug. 2011.

<<http://solutions1.emetric.net/cmtpublic/Default.aspx>> The 4th grade participation rates for the standard CMT in math, reading, and writing are tabulated for the years 2006-2011 in Appendix C.

²⁵ See Appendix C

²⁶eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. "2006 Connecticut Mastery Test Participation Rate Report." CT Department of Education, 2011. Web. 1 Aug. 2011. 8th grade participation rates for the standard CMT in math, reading, and writing are tabulated for the years 2006-2011 in Appendix D.

²⁷ See Appendix C

²⁸ See Appendix D and Appendix J

²⁹ See Appendix C and D. In addition to declining participation rates on the standard CMT, the total population of the 4th and 8th grade groups also declined in the state from 2006 to 2011. In other words, the total number of students in 4th and 8th grade in Connecticut's public schools has decreased and a smaller percentage of students have taken the standard CMT in math and reading compared to past years.

³⁰ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. "2011 Connecticut Mastery Test Participation Report-Grade 4." CT Department of Education, 2011. Web. 1 August 2011.

³¹ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. "2011 Connecticut Mastery Test-Grade 4-State-Subgroups by Special Education." CT Department of Education, 2011. Web. 1 August 2011.

³² eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. Subgroup Report, "2011 Connecticut Mastery Test-Grade 4-State-Subgroups by Special Education." CT Department of Education, 2011. Web. 1 Aug. 2011.

³³ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. “2011 Connecticut Mastery Test Participation Rate Report.” CT Department of Education, 2011. Web. 1 Aug. 2011. *See* Appendix C and D for participation rates from 2006 to 2011 on the 4th and 8th grade standard CMT in writing.

³⁴ According to state data, more than 75% of students with disabilities in the 4th and 8th grade received test accommodations on the standard CMT in writing in 2011. eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. “2010-2011 Accommodations Summary Report.” CT Department of Education, 2011. Web. 1 Aug. 2011.

³⁵ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. “State by School/District Report Grade 8, 2006-2011.” CT Department of Education, 2011. Web. 1 Aug. 2011. *See* Appendix D for the percentage of students at or above proficient level in the 8th grade for the years 2006-2011.

³⁶ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. “State by School/District Report Grade 4, 2006-2011.” CT Department of Education, 2011. Web. 1 Aug. 2011. *See* Appendix C for the percentage of students at or above proficient level in the 4th grade for the years 2006-2011.

³⁷ Appendix C

³⁸ Appendix C

³⁹ Appendix C

⁴⁰ Appendix C

⁴¹ Appendix D

⁴² Appendix C

⁴³ Appendix C

⁴⁴ Appendix D

⁴⁵ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. “2006 Overall Summary Report.” CT Department of Education, 2011. Web. 1 Aug. 2011. *See* Appendix C and D for 4th and 8th grade average scale scores on the standard CMT in reading, writing, and math from 2006-2011.

⁴⁶ Appendix C for 4th grade average scale scores and Appendix D for 8th grade average scale scores.

⁴⁷ Appendix C and D

⁴⁸ Appendix D

⁴⁹ *See* Appendix D

⁵⁰ *See* formula for Pearson’s *r* here:

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

⁵¹ *See* Appendix C for 4th grade standard CMT data. A correlation for the 4th grade standard CMT math data revealed that the percent of students participating and the percent of students at or above the proficient level were significantly related, $r = -0.987$, $n = 6$, $p < .01$, two tails. A correlation for the 4th grade standard CMT reading data revealed that the percent of students participating and the percent of students at or above the proficient level were significantly related, $r = -0.908$, $n = 6$, $p < .05$, two tails.

⁵² A correlation for the 4th grade standard CMT reading data revealed that the percent of students participating and the average scale score were significantly related, $r = -0.965$, $n = 6$, $p < .01$, two tails. A correlation for the 4th grade standard CMT math data revealed that the percent of students participating and the average scale score were significantly related, $r = -0.929$, $n = 6$, $p < .01$, two tails.

⁵³ A correlation for the 8th grade standard CMT math data revealed that the percent of students participating and the percent of students at or above the proficient level were significantly related, $r = -0.925$, $n = 6$, $p < .01$, two tails. A correlation for the 8th grade standard CMT reading data revealed that the percent of students participating and the percent of students at or above the proficient level were significantly related $r = -0.969$, $n = 6$, $p < .01$, two tails.

⁵⁴ A correlation for the 8th grade standard CMT reading data revealed that the percent of students participating and the average scale score were significantly related, $r = -0.856$, $n = 6$, $p < .05$, two tails. A correlation for the 8th grade standard CMT math data revealed that the percent of students participating and the average scale score were significantly related, $r = -0.917$, $n = 6$, $p = .01$, two tails.

⁵⁵ A correlation for the 4th grade standard CMT writing data revealed that the percent of students participating and the percent at or above the proficient level were not significantly related, $r = 0.197$, $n = 6$, $p > .05$, two tails. A correlation for the 8th grade standard CMT writing data revealed that the percent of students participating and the percent at or above the proficient level were not significantly related, $r = -0.076$, $n = 6$, $p > .05$, two tails.

⁵⁶ There is a possibility that an unknown number of the students taking the MAS may have scored at or above the proficient level on the standard CMT. Our method relies on district’s assessment and documentation that students taking the MAS would not have scored proficient or above on the standard CMT because of their disability. This

recalculated percentage of students at proficient or above does not take into account the slightly increasing percentage of students on the Skills Checklist. There has been a slight increase since 2006 of the percent of all students taking the Skills Checklist in grades 4 and 8. Since 2006, the percentage of students that were excluded because of ELL status, absent, or having “No Valid Score” on the standard CMT reports has remained stable.

⁵⁷ The 4th grade “Overall Summary Report” for the state indicates that there 1875 students that took the MAS in reading. However, the state’s Modified Assessment Report indicates that only 1848 out of these 1875 students had a valid score on the MAS in reading. A similar discrepancy between the two reports exists for the MAS in math and reading numbers in the 4th and 8th grade in 2010 and 2011.

⁵⁸ The Connecticut State Department of Education presents the “Reported” percent at or above proficient on its eMetric website as the percent of all students that scored above the scale score cut point for “proficient” divided by the total number of students taking the standard CMT, then multiplied by 100. We calculate the “Revised” percent at or above proficient by adding the number of students taking the MAS (as non-proficient) to the denominator of the state’s calculation.

⁵⁹ See Appendix E for a recalculated percentage of students at or above the proficient level on the standard CMT in math and reading from 2009 - 2011 in 4th and 8th grade for the state. Note that the recalculations for 2009 are based on an estimated number of students taking the modified assessment on the MAS pilot. The state did not report the 2009 pilot MAS data.

⁶⁰ See Appendix H and I for year over year percentage of students at or above the proficient level in selected subgroups.

⁶¹ Change in percent of at or above proficient level was calculated by subtracting the percent at or above the proficient level in 2009 by percent at or above proficient in 2008. (Column 1) The same calculation is made for the revised percent at or above the proficient level. (Column 2) The portion of change due to the excluding students with disabilities taking the MAS is calculated by subtracting Column 1 by Column 2 then dividing the remainder by Column 1 and multiplying by 100.

⁶² eMetric. *Data Interaction for the Connecticut Mastery Test, 4th Generation*. “2011 Connecticut Mastery Test Participation Report.” CT Department of Education, 2011. Web. 1 Aug. 2011. See Appendix F and G for the percentage of all students taking the MAS by district, reported and revised percentages of students at or above the proficient level, and participation rates for the 4th and 8th grade standard CMT in reading and math.

⁶³ Appendix F

⁶⁴ Appendix G

⁶⁵ Appendix G

⁶⁶ eMetric. *Data Interaction for Connecticut Mastery Test, 4th Generation*. “Modified Assessment Report Grade 4 for 2010-2011.” CT Department of Education, 2011. Web. 1 Aug. 2011. Report for all districts in the state. Students from the following districts combined for 1108 out of 1848 test takers with a valid score on the 4th grade MAS in reading in 2011: Bridgeport, Danbury, East Hartford, Fairfield, Hamden, Hartford, Manchester, Meriden, New Britain, New Haven, New Milford, Norwich, Stamford, Torrington, Waterbury, West Hartford, West Haven, Windham.

⁶⁷ Appendix G. Note that the overall prevalence of students with disabilities does not easily explain the differences in participation on the MAS between these three districts. According to the State Department of Education, the overall prevalence rate of students with disabilities in each district was 10.2% of all students in Fairfield, 12.4% of all students in Bridgeport, and 12% of all students in New Haven. (Connecticut State Department of Education. *Connecticut Education Data and Research (CEDaR) District and School Snapshots*. “Special Education - Number of Students for Whom District is Fiscally Responsible 2010-2011.” CT Department of Education, 2011. Web. 25 Nov. 2011.) A deeper analysis of grade-level percentages of students with disabilities and types of disabilities may help understand the disparate participation on the MAS and apparent similarities in overall prevalence of students with disabilities.

⁶⁸ Appendix G. The state reports the percent at or above the proficient level for each district and the percent of students taking the MAS for each district in each subject. We recalculate the percent at or above the proficient level using the formula from figure 4.

⁶⁹ McQuillan, Mark K. “2009 CMT Results Post Gains Across Grade 3-8 in All Content Areas.” *News*, Connecticut State Department of Education. 29 July 2009. Web. 23 Sept. 2011. Pg. 2.

⁷⁰ nces.ed.gov.nationsreportcard. *National Assessment of Educational Progress*. “Inclusion of Special Needs Students.” National Center for Education Statistics, 2011. 15 Jan. 2012.

<<http://nces.ed.gov/nationsreportcard/about/inclusion.asp>> Policies on participation for the NAEP are different than the CMT. The NCES indicates that, “NAEP inclusion rates have generally remained steady or increased since 2003.”

⁷¹ Bandeira de Mello, V. (2011) “Mapping State Proficiency Standards Onto the NAEP Scales: Variation and Change in State Standards for Reading and Mathematics, 2005-2009”. (NCES 2011-458). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC; Government Printing Office: page 25-26. Web. 6 Oct. 2011. <<http://nces.ed.gov/nationsreportcard/pdf/studies/2011458.pdf>>

⁷² Koretz 72-73. Also *See No Child Left Behind Act of 2001*. Pub. L. 107-110. 115 Stat. 1425. 8 Jan. 2002. Web. 20 November 2011. < <http://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf>>. An explanation of consequences for not meeting AYP targets are in Title I, Part A: Section 1116, “Academic Assessment and Local Education Agency and School Improvement.” Under NCLB, the consequences for schools of not meeting increasing percentages of all students at proficient levels, known as Annual Yearly Progress (AYP), included: required school improvement plans, student transfers to other schools within a district, mandatory use of federal funds for private tutoring, replacing all or most of the school staff, and reopening under private management or as a charter school.

⁷³ Under NCLB, the consequences for schools of not meeting increasing percentages of all students at proficient levels, known as Annual Yearly Progress (AYP), included: required school improvement plans, student transfers to other schools within a district, mandatory use of federal funds for private tutoring, replacing all or most of the school staff, and reopening under private management or as a charter school. *See* Koretz 72-73. Also *See No Child Left Behind Act of 2001*. Pub. L. 107-110. 115 Stat. 1425. 8 Jan. 2002. Web. 20 November 2011. < <http://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf>>. An explanation of consequences for not meeting AYP targets are in Title I, Part A: Section 1116, “Academic Assessment and Local Education Agency and School Improvement.”

⁷⁴ A site visit by the CT State Department of Education to the Hartford Public Schools in December 2010 found that the district’s “theory of action” and funding scheme were related to violations of special education law. For example, while principals had budgetary autonomy, they lacked evaluation, guidance, and resources to fulfill special education requirements. Furthermore, several IEP’s for students with disabilities were incomplete at central office, there was a trend that Individual Education Program’s (IEP’s) lacked parent and student input information, the student-based budget scheme did not provide sufficient resources for students with disabilities, and the academic and special education programs did not coordinate efforts, thus the overall academic program may have been in conflict with special education goals and priorities. There were a variety of other violations as well. *See* “Hartford Public Schools Monitoring Visit Report.” Connecticut State Department of Education. Bureau of Special Education. 30 September 2011.

⁷⁵ *See* Koretz 2008, particularly Chapter 10: “Inflated Test Scores” for an overview. Also *see* Vasquez Heilig, J. & Darling-Hammond, L. (2008). “Accountability Texas-style: The progress and learning of urban minority students in a high-stakes testing context.” *Educational Evaluation and Policy Analysis*. 30(2), 75-110. Web. 1 Feb. 2011. Also *see* Valenzuela et. al. *Leaving Children Behind: How “Texas Style” Accountability Fails Latino Youth*. Albany, NY: State University of New York Press, 2005. Print.

Appendix A: Grade 4 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 3rd edition* from 2000-2004

Year	Total Population	Math				Reading				Writing			
		# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹
2000	44,310	41,474	93.6%	82.0%	250.1	41,073	92.7%	70.7%	249.7	40,917	92.3%	79.6%	249.7
2001	44,582	42,813	96.0%	81.4%	248.7	42,374	95.0%	71.0%	248.4	42,180	94.6%	82.2%	256.7
2002	44,375	42,820	96.5%	80.8%	248.7	42,599	96.0%	68.7%	246.0	42,412	95.6%	81.4%	254.2
2003	43,593	42,463	97.4%	80.1%	248.4	42,141	96.7%	68.7%	245.4	41,796	95.6%	82.6%	259.7
2004	42,481	42,051	99.0%	78.9%	246.6	41,933	98.7%	66.8%	242.7	41,629	98.0%	81.4%	258.2

¹ Average assessment scale score is reported on a range of 100-400.

*From 2000 to 2004, students with disabilities that had Individualized Education Programs (IEP) were eligible for out-of-level (OOL) testing in math, reading, and writing on the Connecticut Mastery Test 3rd edition. In order to comply with NCLB, Connecticut eliminated out-of-level testing for students with disabilities by 2004. Out-of-level tests had content either above or below a student's school grade level. Information for the out-of-level tests was disaggregated from the standard CMT information.

Appendix B: Grade 8 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 3rd edition* from 2000-2004

Year	Total Population	Math				Reading				Writing			
		# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹
2000	42,291	38,762	91.7%	76.5%	249.8	38,758	91.6%	77.1%	249.4	38,613	91.3%	79.9%	249.5
2001	43,741	41,037	93.8%	76.4%	250.5	41,120	94.0%	77.0%	249.4	40,935	93.6%	78.9%	248.5
2002	44,751	42,579	95.1%	76.7%	250.7	42,569	95.1%	78.1%	252.6	42,443	94.8%	78.8%	248.4
2003	46,004	44,218	96.1%	76.6%	250.0	44,209	96.1%	76.8%	254.0	44,007	95.7%	80.6%	251.2
2004	45,098	44,146	97.9%	75.7%	248.6	44,249	98.1%	75.2%	251.7	44,040	97.7%	80.4%	250.4

¹ Average assessment scale score is reported on a range of 100-400.

*From 2000 to 2004, students with disabilities that had Individualized Education Programs (IEP) were eligible for out-of-level (OOL) testing in math, reading, and writing on the Connecticut Mastery Test 3rd edition. In order to comply with NCLB, Connecticut eliminated out-of-level testing for students with disabilities by 2004. Out-of-level tests had content either above or below a student's school grade level. Information for the out-of-level tests was disaggregated from the standard CMT information.

Appendix C: Grade 4 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 4th edition from 2006-2011

Year	Total Population	Math				Reading				Writing			
		# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹
2006	43,076	42,308	98.2%	80.3%	252.6	42,179	97.9%	71.8%	249.9	42,044	97.6%	84.2%	250.1
2007	42,216	41,483	98.3%	80.9%	256.9	41,394	98.1%	70.6%	248.7	41,189	97.6%	84.1%	252.8
2008	42,613	41,776 ²	98.0%	81.5%	258.1	41,716 ³	97.9%	69.7%	248.7	41,567	97.5%	84.8%	253.1
2009	41,894	39,790	95.0%	84.6%	262.8	39,245	93.7%	74.4%	254.8	40,879	97.6%	85.0%	253.3
2010	41,654	39,520	94.9%	85.2%	267.1	39,090	93.8%	72.9%	252.9	40,708	97.7%	86.5%	252.4
2011	41,266	39,009	94.5%	85.2%	267.3	38,496	93.3%	74.7%	255.5	40,196	97.4%	85.4%	252.4

¹ Average assessment scale score is reported on a range of 100-400.

² CEDAR lists this number as 41,775.

³ CEDAR lists this number as 41,715.

Appendix D: Grade 8 Total Population, Total Participation, Percent At or Above the Proficient Level, Participation Rates, and Average Scale Scores on the CMT 4th edition from 2006-2011

Year	Total Population	Math				Reading				Writing			
		# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹	# Standard CMT	Percent Partic. Standard CMT	Percent At/Above Proficient	Average Assessment Scale Score ¹
2006	45,133	43,944	97.4%	78.9%	251.8	43,832	97.1%	76.6%	249.7	43,836	97.1%	81.9%	250.0
2007	44,857	43,719	97.5%	80.8%	255.7	43,699	97.4%	76.4%	249.8	43,673	97.4%	82.5%	252.4
2008	43,930	42,891	97.6%	81.2%	255.4	42,843	97.5%	77.0%	247.6	42,779	97.4%	82.7%	253.0
2009	43,259	41,156	95.1%	84.5%	260.3	40,996	94.8%	80.5%	251.3	42,239	97.6%	83.7%	254.2
2010	43,299	41,163	95.1%	86.6%	264.4	41,060	94.8%	82.6%	259.7	42,265	97.6%	80.6%	250.3
2011	42,528	40,096	94.3%	86.0%	264.0	39,992	94.0%	83.4%	261.4	41,413	97.4%	81.6%	250.9

¹ Average assessment scale score is reported on a range of 100-400.

Appendix E: Grade 4 and Grade 8 Reported and Recalculated* Percent At or Above the Proficient Level in the State on the Standard CMT in 2006-2011

Grade 4:

Year	Reading				Math			
	# Tested Standard CMT	# Tested on MAS	%At/Above Proficient	%At/Above Proficient Revised	# Tested Standard CMT	# Tested on MAS	%At/Above Proficient	%At/Above Proficient Revised
2006	42,179	0	71.8%	71.8%	42,308	0	80.3%	80.3%
2007	41,394	0	70.6%	70.6%	41,483	0	80.9%	80.9%
2008	41,716	0	69.7%	69.7%	41,776	0	81.5%	81.5%
2009	39,245	1751**	74.4%	71.2%	39,790	1255**	84.6%	82.0%
2010	39,090	1,731	72.9%	69.8%	39,520	1,336	85.2%	82.4%
2011	38,496	1,875	74.7%	71.2%	39,009	1,398	85.2%	82.3%

Grade 8:

Year	Reading				Math			
	# Tested Standard CMT	# Tested on MAS	%At/Above Proficient	%At/Above Proficient Revised	# Tested Standard CMT	# Tested on MAS	%At/Above Proficient	%At/Above Proficient Revised
2006	43,832	0	76.6%	76.6%	43,944	0	78.9%	78.9%
2007	43,699	0	76.4%	76.4%	43,719	0	80.8%	80.8%
2008	42,843	0	77.0%	77.0%	42,891	0	81.2%	81.2%
2009	40,996	1266**	80.5%	78.1%	41,156	1125**	84.5%	82.3%
2010	41,060	1,241	82.6%	80.2%	41,163	1,123	86.6%	84.3%
2011	39,992	1,490	83.4%	80.4%	40,096	1,374	86.0%	83.2%

*Assistant Superintendent of Curriculum and Instruction Eileen Howley used a similar method for recalculating the percentage of students at or above the proficient level on the standard CMT in math and reading for the West Hartford Public Schools district in 2009. Assistant Superintendent Howley noted, "The MAS was taken by the lowest performing special education students-those who had taken the CMT/CAPT in previous years had typically not reached the proficient level in that subject. The results of the MAS pilot were not incorporated in the state reported CMT and CAPT results for 2009. As a consequence reported scores increased in reading and math compared to 2008 when all students took the regular CMT and CAPT tests. In West Hartford 2.6% of all students tested took the MAS in mathematics and 3.7% of students tested took the MAS in reading. Presuming none of the MAS students would have reached mastery, simply excluding these students increased the math scores by 2.0% and the reading scores by 2.8% compared to 2008 results."

**Most of the students listed in 2009 under the "No Valid Score" category in the participation reports took the MAS pilot. We determined an average percent of students with "No Valid Score" from 2006-2008 and 2010-2011 in reading and math for grades 4 and 8. Then we subtracted the absolute number of students generated by the average percent of students from the 2009 "No Valid Score" category. We estimate that the remaining number of students in the "No Valid Score" category participated in the MAS pilot.

Appendix F: Grade 4 Reported and Recalculated Percent At or Above the Proficient Level by District for the Standard CMT in Math and Reading 2011

District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
Andover School District	97.1%	97.1%	2.9%	94.3%	97.1%	97.1%	2.9%	94.3%
Ansonia School District	85.6%	94.8%	3.3%	82.7%	69.4%	92.5%	5.7%	65.4%
Ashford School District	81.3%	96.0%	2.0%	79.6%	58.3%	96.0%	2.0%	57.1%
Avon School District	97.5%	97.5%	1.4%	96.1%	94.1%	96.5%	2.1%	92.1%
Barkhamsted School District	96.2%	100.0%	0.0%	96.2%	96.2%	100.0%	0.0%	96.2%
Berlin School District	91.4%	99.1%	0.4%	91.0%	87.4%	97.9%	1.7%	85.9%
Bethany School District	97.5%	92.9%	5.9%	91.7%	90.9%	90.6%	8.2%	83.4%
Bethel School District	94.4%	97.9%	0.0%	94.4%	86.6%	97.5%	0.4%	86.2%
Bloomfield School District	74.1%	91.8%	6.8%	69.0%	62.6%	89.1%	9.5%	56.6%
Bolton School District	92.7%	96.5%	3.5%	89.5%	81.5%	94.7%	5.3%	77.2%
Bozrah School District	100.0%	95.2%	4.8%	95.2%	95.0%	95.2%	4.8%	90.4%
Branford School District	92.2%	95.4%	1.7%	90.6%	83.8%	92.1%	4.6%	79.8%
Bridgeport School District	55.3%	92.2%	3.1%	53.5%	41.0%	90.6%	4.6%	39.0%
Bristol School District	79.5%	96.2%	2.1%	77.8%	64.3%	95.2%	3.0%	62.3%
Brookfield School District	95.1%	96.7%	2.9%	92.3%	86.3%	97.6%	1.9%	84.7%
Brooklyn School District	95.1%	99.0%	1.0%	94.1%	72.8%	99.0%	1.0%	72.1%
Canterbury School District	91.9%	98.4%	1.6%	90.4%	82.3%	98.4%	1.6%	81.0%
Canton School District	96.2%	97.1%	1.5%	94.7%	92.2%	94.2%	3.6%	88.8%
Cheshire School District	95.2%	98.6%	0.8%	94.4%	84.2%	97.5%	2.0%	82.5%
Chester School District	100.0%	100.0%	0.0%	100.0%	92.7%	95.3%	4.7%	88.3%
Clinton School District	92.5%	99.3%	0.7%	91.9%	85.4%	98.0%	2.0%	83.7%
Colchester School District	93.0%	99.1%	0.4%	92.6%	81.7%	98.7%	0.4%	81.4%
Columbia School District	94.8%	98.3%	0.0%	94.8%	78.9%	96.6%	1.7%	77.5%
Coventry School District	92.3%	97.5%	1.7%	90.7%	84.2%	95.0%	4.2%	80.6%
Cromwell School District	89.0%	97.6%	0.6%	88.5%	81.3%	95.8%	2.4%	79.3%
Danbury School District	86.9%	92.0%	3.9%	83.4%	68.0%	89.3%	6.4%	63.5%
Darien School District	97.8%	98.1%	0.8%	97.0%	93.2%	97.9%	1.1%	92.2%
Deep River School District	92.6%	93.1%	5.2%	87.7%	79.6%	93.1%	5.2%	75.4%
Derby School District	75.2%	94.0%	5.2%	71.3%	61.7%	92.2%	6.0%	57.9%
East Granby School District	94.7%	97.4%	0.0%	94.7%	78.7%	97.4%	0.0%	78.7%
East Haddam School District	92.0%	93.6%	5.3%	87.1%	87.4%	92.6%	6.4%	81.7%
East Hampton School District	91.3%	96.1%	2.6%	88.9%	88.5%	95.5%	3.2%	85.6%
East Hartford School District	66.9%	93.7%	3.4%	64.6%	50.4%	92.8%	3.6%	48.5%
East Haven School District	70.3%	94.3%	3.3%	67.9%	57.5%	91.9%	6.1%	53.9%
East Lyme School District	94.0%	98.5%	1.5%	92.6%	85.5%	98.0%	2.0%	83.8%
East Windsor School District	74.7%	97.1%	2.9%	72.5%	60.2%	96.1%	3.9%	57.9%
Eastford School District	91.3%	100.0%	0.0%	91.3%	78.3%	100.0%	0.0%	78.3%
Easton School District	98.3%	96.0%	2.4%	95.9%	91.7%	95.2%	3.2%	88.7%
Ellington School District	94.0%	98.6%	1.4%	92.7%	83.0%	97.2%	2.8%	80.7%

District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
Enfield School District	92.9%	95.2%	1.7%	91.3%	78.3%	94.2%	2.6%	76.2%
Essex School District	88.7%	97.3%	1.4%	87.4%	90.1%	97.3%	1.4%	88.8%
Fairfield School District	94.1%	96.6%	2.4%	91.8%	89.8%	96.0%	2.9%	87.2%
Farmington School District	96.3%	95.0%	2.5%	93.8%	94.4%	95.4%	1.8%	92.7%
Franklin School District	100.0%	95.2%	4.8%	95.2%	100.0%	95.2%	4.8%	95.2%
Glastonbury School District	95.0%	98.1%	0.9%	94.1%	88.4%	97.4%	1.3%	87.2%
Granby School District	95.7%	96.5%	3.5%	92.4%	88.4%	96.5%	3.5%	85.3%
Greenwich School District	93.1%	96.1%	1.7%	91.5%	89.5%	96.1%	1.7%	87.9%
Griswold School District	91.9%	93.8%	4.2%	88.0%	80.9%	91.0%	6.9%	75.2%
Groton School District	84.5%	94.8%	2.5%	82.3%	73.8%	94.6%	3.0%	71.5%
Guilford School District	94.8%	98.5%	0.7%	94.1%	88.8%	98.5%	1.1%	87.8%
Hamden School District	81.9%	89.9%	7.1%	75.9%	74.3%	88.2%	8.9%	67.5%
Hartford School District	60.8%	85.8%	9.5%	54.7%	43.4%	84.7%	10.4%	38.7%
Hartland School District	86.4%	95.7%	4.3%	82.7%	90.5%	91.3%	8.7%	82.6%
Hebron School District	93.8%	98.0%	1.4%	92.5%	92.3%	96.6%	2.7%	89.8%
Kent School District	87.1%	93.9%	3.0%	84.4%	78.1%	97.0%	0.0%	78.1%
Killingly School District	75.3%	96.4%	1.5%	74.1%	68.1%	95.4%	2.5%	66.4%
Lebanon School District	92.6%	97.9%	0.0%	92.6%	83.9%	96.9%	0.0%	83.9%
Ledyard School District	95.8%	96.5%	1.2%	94.6%	86.0%	95.3%	2.3%	84.0%
Lisbon School District	83.0%	96.4%	3.6%	80.0%	75.5%	96.4%	3.6%	72.8%
Litchfield School District	96.2%	100.0%	0.0%	96.2%	88.5%	100.0%	0.0%	88.5%
Madison School District	99.2%	98.8%	0.8%	98.4%	94.3%	98.0%	1.6%	92.8%
Manchester School District	85.2%	91.6%	5.6%	80.3%	71.4%	89.4%	8.6%	65.1%
Mansfield School District	93.9%	99.2%	0.0%	93.9%	85.4%	98.5%	0.8%	84.7%
Marlborough School District	98.0%	96.2%	2.9%	95.1%	88.2%	97.1%	1.9%	86.5%
Meriden School District	73.9%	92.8%	3.9%	70.9%	60.7%	91.0%	5.5%	57.2%
Middletown School District	79.6%	96.8%	2.0%	78.0%	71.1%	95.2%	3.6%	68.5%
Milford School District	91.1%	97.9%	0.7%	90.5%	76.9%	97.5%	0.9%	76.2%
Monroe School District	97.9%	96.0%	2.8%	95.1%	96.1%	93.1%	5.7%	90.6%
Montville School District	88.8%	97.5%	1.5%	87.5%	74.4%	96.5%	2.5%	72.5%
Naugatuck School District	82.5%	96.8%	1.1%	81.6%	69.0%	96.3%	1.1%	68.2%
New Britain School District	47.0%	86.6%	10.0%	42.1%	37.7%	84.5%	11.6%	33.1%
New Canaan School District	98.7%	97.1%	1.9%	96.8%	95.0%	97.4%	1.6%	93.5%
New Fairfield School District	93.8%	98.1%	1.4%	92.5%	84.2%	98.1%	1.4%	83.0%
New Hartford School District	97.7%	97.8%	1.1%	96.6%	90.9%	98.9%	0.0%	90.9%
New Haven School District	67.4%	88.1%	8.3%	61.6%	49.1%	86.1%	10.4%	43.8%
New London School District	62.2%	90.7%	5.2%	58.8%	48.4%	87.5%	6.9%	44.9%
New Milford School District	87.4%	95.8%	3.3%	84.5%	83.0%	90.2%	8.5%	75.9%
Newington School District	95.7%	97.1%	1.6%	94.1%	85.2%	96.1%	2.6%	83.0%
Newtown School District	97.5%	97.4%	0.7%	96.8%	91.8%	95.9%	2.2%	89.7%
Norfolk School District	88.9%	100.0%	0.0%	88.9%	73.1%	96.3%	3.7%	70.4%

District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
North Branford School District	94.8%	96.3%	3.7%	91.3%	80.8%	93.8%	6.2%	75.8%
North Canaan School District	92.3%	100.0%	0.0%	92.3%	79.5%	100.0%	0.0%	79.5%
North Haven School District	90.2%	96.1%	1.6%	88.7%	81.1%	93.7%	3.9%	77.9%
North Stonington School District	90.4%	92.9%	5.4%	85.4%	93.9%	87.5%	10.7%	83.7%
Norwalk School District	84.3%	95.6%	1.5%	83.0%	70.1%	94.9%	2.3%	68.4%
Norwich School District	68.9%	91.5%	5.8%	64.8%	53.2%	90.8%	6.5%	49.6%
Old Saybrook School District	96.2%	97.2%	0.0%	96.2%	94.2%	95.4%	1.9%	92.4%
Orange School District	98.4%	98.4%	1.1%	97.3%	94.6%	98.4%	1.1%	93.6%
Oxford School District	94.3%	97.2%	1.1%	93.2%	81.3%	97.2%	1.1%	80.4%
Plainfield School District	86.5%	95.7%	2.4%	84.4%	65.8%	95.2%	2.4%	64.2%
Plainville School District	89.6%	93.5%	4.9%	85.1%	82.2%	91.4%	7.0%	76.4%
Plymouth School District	80.5%	97.5%	0.0%	80.5%	78.4%	95.9%	0.8%	77.8%
Pomfret School District	94.4%	98.2%	1.8%	92.7%	92.6%	98.2%	1.8%	90.9%
Portland School District	93.0%	99.2%	0.8%	92.3%	85.7%	97.7%	2.3%	83.7%
Preston School District	95.3%	97.7%	0.0%	95.3%	83.7%	97.7%	0.0%	83.7%
Putnam School District	76.0%	95.0%	1.0%	75.2%	59.6%	93.1%	2.0%	58.3%
Redding School District	97.9%	96.6%	2.7%	95.2%	91.4%	95.9%	3.4%	88.3%
Regional School District 06	90.1%	94.7%	4.0%	86.4%	88.7%	94.7%	4.0%	85.1%
Regional School District 10	90.9%	97.8%	1.8%	89.3%	89.5%	97.8%	1.8%	87.9%
Regional School District 12	98.7%	93.9%	4.9%	93.8%	92.0%	91.5%	7.3%	85.2%
Regional School District 13	89.4%	97.3%	2.2%	87.4%	87.4%	94.1%	5.4%	82.7%
Regional School District 14	91.5%	94.6%	4.0%	87.8%	84.4%	94.6%	4.0%	81.0%
Regional School District 15	95.4%	98.6%	1.1%	94.3%	90.8%	97.7%	2.0%	89.0%
Regional School District 16	93.6%	96.6%	1.1%	92.5%	82.9%	95.5%	2.2%	81.0%
Regional School District 17	93.6%	99.5%	0.5%	93.1%	88.8%	99.5%	0.5%	88.4%
Regional School District 18	98.2%	100.0%	0.0%	98.2%	91.1%	100.0%	0.0%	91.1%
Ridgefield School District	98.4%	98.2%	0.8%	97.6%	88.5%	97.7%	1.0%	87.6%
Rocky Hill School District	94.4%	94.1%	2.1%	92.3%	81.1%	93.1%	3.2%	78.4%
Salem School District	92.5%	94.6%	3.6%	89.1%	84.9%	94.6%	3.6%	81.8%
Salisbury School District	96.2%	100.0%	0.0%	96.2%	100.0%	100.0%	0.0%	100.0%
Seymour School District	86.0%	96.0%	1.3%	84.9%	67.9%	93.7%	3.6%	65.4%
Sharon School District	69.2%	92.9%	0.0%	69.2%	73.1%	92.9%	0.0%	73.1%
Shelton School District	90.7%	96.6%	2.4%	88.5%	84.2%	95.6%	3.4%	81.3%
Sherman School District	97.8%	97.8%	2.2%	95.6%	95.6%	97.8%	2.2%	93.5%
Simsbury School District	97.0%	97.1%	1.6%	95.4%	91.9%	96.0%	2.9%	89.2%
Somers School District	91.2%	98.4%	1.6%	89.7%	77.4%	97.6%	2.4%	75.5%
South Windsor School District	93.7%	96.8%	1.9%	91.9%	86.9%	95.8%	2.9%	84.3%
Southington School District	96.3%	96.5%	1.9%	94.4%	87.9%	94.4%	4.0%	84.3%
Sprague School District	97.3%	92.5%	5.0%	92.3%	80.6%	90.0%	7.5%	74.4%
Stafford School District	88.0%	95.4%	3.8%	84.6%	75.2%	95.4%	3.8%	72.3%
Stamford School District	81.3%	91.8%	5.9%	76.4%	67.0%	90.2%	7.3%	62.0%

District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
Sterling School District	86.5%	86.0%	7.0%	80.0%	70.3%	86.0%	7.0%	65.0%
Stonington School District	87.1%	96.2%	3.2%	84.3%	83.1%	93.0%	6.5%	77.7%
Stratford School District	85.7%	96.5%	1.9%	84.0%	77.7%	95.7%	2.7%	75.6%
Suffield School District	96.9%	98.0%	0.5%	96.4%	89.2%	97.5%	1.5%	87.8%
Thomaston School District	86.6%	96.5%	2.4%	84.5%	73.2%	96.5%	2.4%	71.4%
Thompson School District	82.9%	98.1%	0.0%	82.9%	76.7%	96.3%	0.9%	76.0%
Tolland School District	97.2%	96.4%	3.1%	94.2%	91.5%	95.5%	4.0%	87.8%
Torrington School District	87.3%	88.0%	9.3%	79.0%	79.0%	84.5%	12.8%	68.6%
Trumbull School District	98.2%	96.8%	2.3%	95.9%	88.1%	96.0%	3.0%	85.4%
Vernon School District	84.0%	95.5%	1.5%	82.7%	73.2%	92.9%	3.7%	70.4%
Voluntown School District	93.9%	100.0%	0.0%	93.9%	87.9%	100.0%	0.0%	87.9%
Wallingford School District	93.8%	97.1%	1.7%	92.2%	79.9%	96.3%	2.5%	77.9%
Waterbury School District	78.3%	84.4%	7.7%	71.8%	57.0%	82.0%	10.2%	50.7%
Waterford School District	93.6%	98.1%	0.5%	93.1%	87.1%	98.1%	0.5%	86.7%
Watertown School District	85.0%	93.8%	3.7%	81.8%	83.0%	92.1%	5.4%	78.4%
West Hartford School District	94.8%	94.6%	3.4%	91.5%	86.4%	93.6%	3.8%	83.0%
West Haven School District	79.0%	90.9%	6.4%	73.8%	68.0%	89.5%	7.8%	62.5%
Westbrook School District	91.4%	93.5%	0.0%	91.4%	89.7%	93.5%	0.0%	89.7%
Weston School District	98.6%	95.8%	2.3%	96.3%	89.6%	97.7%	0.9%	88.8%
Westport School District	97.2%	98.5%	1.3%	95.9%	92.2%	98.5%	1.3%	91.0%
Wethersfield School District	90.3%	97.6%	1.0%	89.4%	80.7%	95.8%	2.8%	78.4%
Willington School District	84.3%	98.1%	1.9%	82.7%	78.4%	98.1%	1.9%	76.9%
Wilton School District	97.0%	99.1%	0.9%	96.1%	94.9%	98.8%	1.2%	93.8%
Winchester School District	76.0%	88.1%	5.9%	71.2%	69.3%	85.6%	8.5%	63.0%
Windham School District	69.9%	86.1%	11.3%	61.8%	52.0%	84.6%	12.8%	45.2%
Windsor Locks School District	90.8%	94.4%	1.6%	89.3%	75.0%	92.1%	4.0%	71.9%
Windsor School District	85.5%	93.1%	5.5%	80.7%	72.9%	94.2%	4.4%	69.6%
Wolcott School District	94.4%	98.5%	1.0%	93.5%	84.4%	95.5%	4.0%	81.0%
Woodbridge School District	97.1%	97.2%	1.9%	95.2%	92.2%	95.4%	3.7%	88.8%
Woodstock School District	89.6%	96.0%	4.0%	86.0%	89.6%	96.0%	4.0%	86.0%
ACES	78.1%	97.3%	2.7%	76.0%	72.6%	97.3%	2.7%	70.6%
Amistad Academy	94.4%	97.3%	2.7%	91.9%	67.6%	95.9%	4.1%	64.8%
CES	88.1%	91.3%	8.7%	80.4%	81.0%	91.3%	8.7%	74.0%
CREC	92.4%	96.4%	3.6%	89.1%	88.5%	94.9%	5.1%	84.0%
Elm City College Preparatory School	77.4%	96.4%	3.6%	74.6%	58.5%	96.4%	3.6%	56.4%
Highville Charter School	57.1%	94.6%	5.4%	54.0%	45.7%	94.6%	5.4%	43.2%
Integrated Day Charter School	59.4%	97.0%	3.0%	57.6%	53.1%	97.0%	3.0%	51.5%
Jumoke Academy	72.7%	93.6%	6.4%	68.0%	61.4%	93.6%	6.4%	57.5%
LEARN	87.1%	97.7%	0.0%	87.1%	67.9%	96.6%	1.1%	67.1%
New Beginnings Inc., Family Academy	54.8%	95.5%	4.5%	52.3%	38.1%	95.5%	4.5%	36.4%
Odyssey Community School	78.8%	94.3%	5.7%	74.3%	69.7%	94.3%	5.7%	65.7%

Appendix G: Grade 8 Reported and Recalculated Percent At or Above the Proficient Level by District for the Standard CMT in Math and Reading 2011

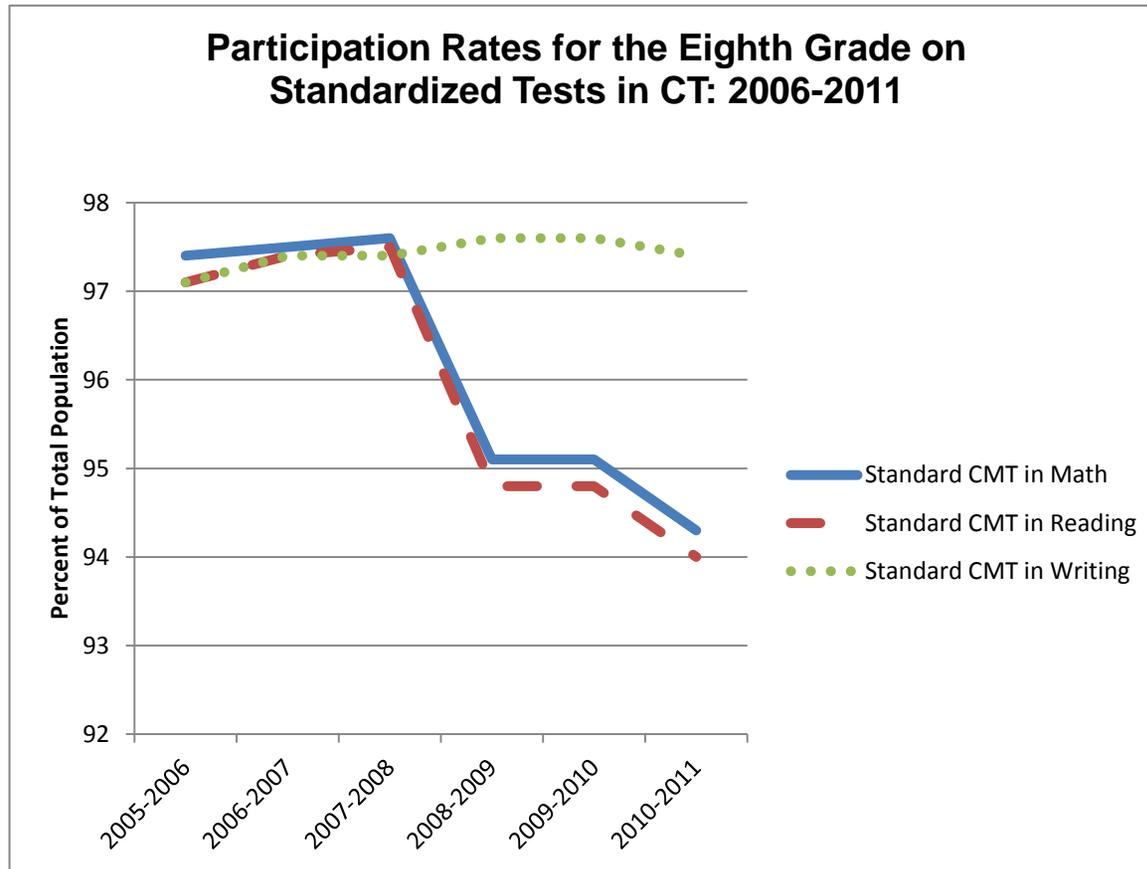
District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
Ansonia School District	86.5%	95.2%	2.1%	84.6%	71.3%	95.2%	2.1%	69.8%
Ashford School District	82.5%	96.6%	3.4%	79.7%	82.5%	96.6%	3.4%	79.7%
Avon School District	98.6%	97.7%	1.0%	97.6%	97.9%	97.0%	1.7%	96.2%
Berlin School District	95.6%	95.8%	3.3%	92.4%	96.5%	96.2%	2.9%	93.7%
Bethel School District	96.3%	97.3%	0.9%	95.4%	91.2%	97.7%	0.9%	90.4%
Bloomfield School District	77.8%	94.4%	4.2%	74.5%	82.1%	93.7%	4.9%	78.0%
Bolton School District	91.2%	97.1%	1.4%	89.9%	82.1%	95.7%	2.9%	79.7%
Bozrah School District	92.3%	100.0%	0.0%	92.3%	92.3%	100.0%	0.0%	92.3%
Branford School District	90.3%	95.6%	1.1%	89.3%	89.4%	93.7%	1.8%	87.7%
Bridgeport School District	60.7%	90.4%	4.0%	58.1%	58.4%	90.6%	3.5%	56.2%
Bristol School District	87.1%	95.5%	2.8%	84.6%	83.8%	95.4%	2.5%	81.7%
Brookfield School District	98.3%	97.9%	2.1%	96.2%	94.8%	98.3%	1.7%	93.2%
Brooklyn School District	95.6%	96.8%	3.2%	92.5%	90.2%	97.9%	2.1%	88.3%
Canterbury School District	98.3%	96.7%	1.6%	96.7%	91.7%	98.4%	1.6%	90.2%
Canton School District	98.6%	97.9%	1.4%	97.2%	95.8%	97.9%	1.4%	94.4%
Cheshire School District	97.0%	96.6%	1.7%	95.3%	96.7%	96.3%	1.7%	95.0%
Clinton School District	90.4%	99.4%	0.6%	89.9%	88.1%	98.9%	0.6%	87.6%
Colchester School District	94.2%	98.4%	1.2%	93.1%	88.4%	98.4%	1.2%	87.3%
Columbia School District	95.8%	92.3%	5.8%	90.1%	93.6%	90.4%	5.8%	88.0%
Coventry School District	92.9%	92.2%	7.2%	86.2%	90.6%	90.8%	8.5%	82.8%
Cromwell School District	92.6%	94.4%	3.5%	89.3%	90.4%	94.4%	3.5%	87.2%
Danbury School District	85.4%	90.9%	3.4%	82.3%	83.0%	89.8%	4.6%	79.0%
Darien School District	98.7%	99.2%	0.0%	98.7%	97.9%	99.2%	0.0%	97.9%
Derby School District	73.3%	96.7%	1.7%	72.0%	73.7%	98.3%	0.8%	73.1%
East Granby School District	95.5%	98.5%	1.5%	94.1%	95.5%	98.5%	1.5%	94.1%
East Haddam School District	92.9%	94.1%	3.0%	90.0%	92.9%	94.1%	3.0%	90.0%
East Hampton School District	96.8%	97.5%	1.2%	95.6%	93.5%	95.7%	3.1%	90.6%
East Hartford School District	65.0%	94.8%	2.6%	63.3%	57.3%	95.4%	2.2%	56.0%
East Haven School District	81.6%	92.9%	3.2%	78.9%	79.0%	93.2%	3.2%	76.4%
East Lyme School District	98.6%	96.3%	1.4%	97.2%	94.7%	96.7%	0.9%	93.8%
East Windsor School District	75.8%	94.8%	4.2%	72.6%	75.6%	93.8%	5.2%	71.6%
Easton School District	99.2%	95.6%	0.7%	98.5%	98.4%	94.9%	0.7%	97.7%
Ellington School District	98.6%	98.6%	0.0%	98.6%	95.3%	98.1%	0.5%	94.8%
Enfield School District	94.4%	96.3%	1.5%	93.0%	91.1%	96.6%	1.5%	89.7%
Fairfield School District	97.0%	96.7%	1.8%	95.2%	96.4%	97.0%	1.8%	94.6%
Farmington School District	98.5%	98.3%	0.9%	97.6%	95.3%	98.0%	0.9%	94.4%
Franklin School District	90.0%	95.2%	4.8%	85.7%	90.0%	95.2%	4.8%	85.7%
Glastonbury School District	97.6%	97.0%	2.0%	95.6%	93.8%	97.2%	2.0%	91.9%
Granby School District	98.7%	97.5%	2.5%	96.2%	94.9%	98.1%	1.3%	93.7%

District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
Greenwich School District	94.1%	96.5%	1.1%	93.0%	92.9%	96.9%	1.1%	91.9%
Griswold School District	87.1%	93.9%	5.3%	82.4%	87.1%	93.9%	5.3%	82.4%
Groton School District	89.1%	95.9%	2.5%	86.8%	84.6%	96.2%	2.8%	82.2%
Guilford School District	99.7%	97.7%	0.7%	99.0%	98.6%	97.7%	0.7%	97.9%
Hamden School District	80.9%	89.9%	7.3%	74.8%	77.9%	91.6%	5.5%	73.5%
Hartford School District	60.1%	84.6%	9.2%	54.2%	56.9%	85.0%	9.9%	51.0%
Kent School District	92.3%	92.9%	3.6%	88.9%	100.0%	92.9%	3.6%	96.3%
Killingly School District	86.6%	96.4%	1.5%	85.3%	80.6%	95.9%	1.5%	79.4%
Lebanon School District	97.0%	96.1%	0.0%	97.0%	92.9%	96.1%	0.0%	92.9%
Ledyard School District	93.3%	92.4%	2.2%	91.1%	90.8%	92.0%	3.1%	87.8%
Lisbon School District	96.9%	94.1%	2.9%	94.0%	93.8%	94.1%	2.9%	91.0%
Litchfield School District	90.1%	96.8%	3.2%	87.2%	89.1%	97.9%	2.1%	87.2%
Madison School District	97.3%	96.1%	1.0%	96.3%	94.7%	97.1%	0.6%	94.1%
Manchester School District	77.2%	90.3%	5.7%	72.6%	72.7%	89.2%	6.1%	68.0%
Mansfield School District	91.7%	97.3%	0.0%	91.7%	89.0%	97.3%	0.0%	89.0%
Meriden School District	75.6%	84.8%	6.9%	69.9%	66.0%	87.2%	7.1%	61.0%
Middletown School District	79.0%	95.1%	1.4%	77.9%	80.5%	95.3%	2.2%	78.7%
Milford School District	94.7%	95.3%	2.2%	92.6%	93.1%	95.7%	1.9%	91.3%
Monroe School District	97.2%	97.0%	2.7%	94.6%	95.0%	96.4%	3.3%	91.9%
Montville School District	87.1%	95.0%	0.9%	86.3%	84.5%	93.7%	0.9%	83.7%
Naugatuck School District	73.6%	93.6%	2.3%	71.8%	75.9%	95.2%	1.3%	74.9%
New Britain School District	44.8%	91.1%	5.0%	42.5%	47.6%	90.4%	5.6%	44.8%
New Canaan School District	98.6%	96.6%	2.0%	96.6%	98.2%	96.6%	2.0%	96.2%
New Fairfield School District	95.7%	98.8%	0.8%	94.9%	90.9%	98.8%	0.8%	90.2%
New Haven School District	69.2%	87.6%	8.7%	62.9%	67.7%	86.7%	9.4%	61.1%
New London School District	51.1%	91.6%	1.6%	50.2%	61.9%	92.6%	1.6%	60.8%
New Milford School District	90.9%	94.9%	3.3%	87.8%	84.7%	93.1%	4.8%	80.5%
Newington School District	91.6%	94.8%	2.8%	89.0%	90.7%	94.8%	3.3%	87.6%
Newtown School District	98.5%	98.0%	1.7%	96.8%	96.2%	98.0%	1.7%	94.6%
North Branford School District	94.5%	97.8%	0.4%	94.1%	89.4%	97.3%	0.4%	89.0%
North Canaan School District	96.6%	100.0%	0.0%	96.6%	93.1%	100.0%	0.0%	93.1%
North Haven School District	90.0%	94.3%	4.1%	86.3%	87.1%	94.6%	3.7%	83.8%
North Stonington School District	88.3%	98.4%	0.0%	88.3%	91.4%	95.1%	3.3%	88.3%
Norwalk School District	82.4%	94.7%	2.6%	80.2%	75.5%	94.4%	2.5%	73.6%
Norwich School District	79.3%	94.4%	2.7%	77.1%	67.7%	93.0%	2.9%	65.7%
Old Saybrook School District	94.1%	96.7%	1.6%	92.6%	88.1%	96.7%	2.5%	85.9%
Oxford School District	94.3%	98.6%	0.7%	93.6%	95.7%	97.9%	0.7%	95.0%
Plainfield School District	83.3%	94.7%	2.6%	81.1%	89.3%	93.7%	3.7%	85.9%
Plainville School District	97.8%	93.3%	5.7%	92.2%	90.7%	93.8%	5.7%	85.5%
Plymouth School District	87.6%	97.5%	0.6%	87.1%	75.8%	97.5%	0.6%	75.3%
Pomfret School District	96.4%	96.6%	0.0%	96.4%	91.1%	96.6%	0.0%	91.1%

District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
Portland School District	95.0%	94.3%	3.8%	91.3%	90.8%	92.5%	4.7%	86.4%
Preston School District	95.9%	98.0%	0.0%	95.9%	83.7%	98.0%	0.0%	83.7%
Putnam School District	83.8%	86.0%	9.3%	75.6%	73.2%	82.6%	9.3%	65.8%
Redding School District	100.0%	98.0%	1.3%	98.7%	100.0%	94.6%	4.7%	95.3%
Regional School District 04	95.2%	96.4%	3.6%	91.8%	88.7%	100.0%	0.0%	88.7%
Regional School District 05	98.1%	97.7%	1.2%	96.9%	95.5%	97.4%	1.2%	94.3%
Regional School District 06	97.3%	98.7%	1.3%	96.0%	95.9%	97.4%	2.6%	93.4%
Regional School District 07	93.9%	98.7%	1.3%	92.7%	91.9%	98.7%	1.3%	90.7%
Regional School District 08	95.1%	98.4%	0.6%	94.5%	93.5%	97.8%	1.3%	92.3%
Regional School District 10	94.8%	98.1%	0.9%	93.9%	94.8%	98.6%	0.5%	94.3%
Regional School District 11	89.1%	95.5%	4.5%	85.1%	86.2%	97.0%	3.0%	83.6%
Regional School District 12	97.4%	96.2%	3.8%	93.7%	92.2%	97.5%	2.5%	89.9%
Regional School District 13	96.5%	97.2%	2.3%	94.3%	91.9%	97.7%	1.7%	90.3%
Regional School District 14	95.9%	97.4%	1.3%	94.6%	95.3%	98.0%	1.3%	94.1%
Regional School District 15	98.0%	97.4%	0.9%	97.1%	93.8%	96.3%	1.7%	92.2%
Regional School District 16	95.2%	97.4%	1.6%	93.7%	90.4%	97.4%	1.0%	89.5%
Regional School District 17	96.0%	95.3%	1.9%	94.1%	97.4%	92.0%	4.7%	92.7%
Regional School District 18	94.7%	100.0%	0.0%	94.7%	89.4%	100.0%	0.0%	89.4%
Ridgefield School District	98.4%	96.0%	1.6%	96.8%	96.3%	95.8%	1.8%	94.5%
Rocky Hill School District	97.1%	96.3%	2.3%	94.8%	93.7%	96.7%	2.3%	91.5%
Salem School District	100.0%	98.4%	1.6%	98.4%	98.3%	96.8%	3.2%	95.2%
Salisbury School District	89.3%	93.3%	6.7%	83.3%	100.0%	93.3%	6.7%	93.3%
Seymour School District	88.5%	97.3%	1.1%	87.5%	83.6%	97.3%	1.1%	82.7%
Shelton School District	95.0%	94.8%	2.9%	92.2%	91.3%	93.4%	3.8%	87.7%
Sherman School District	91.2%	98.3%	1.7%	89.6%	91.2%	98.3%	1.7%	89.6%
Simsbury School District	97.7%	96.8%	2.5%	95.2%	96.1%	96.3%	3.0%	93.2%
Somers School District	95.4%	97.0%	0.7%	94.7%	96.1%	96.3%	1.5%	94.6%
South Windsor School District	97.6%	95.4%	2.3%	95.3%	97.8%	95.9%	1.8%	96.0%
Southington School District	96.3%	95.9%	2.2%	94.1%	91.7%	94.9%	3.2%	88.7%
Sprague School District	88.9%	100.0%	0.0%	88.9%	92.6%	100.0%	0.0%	92.6%
Stafford School District	98.1%	94.7%	5.3%	92.9%	96.4%	96.5%	3.5%	93.0%
Stamford School District	80.9%	90.9%	5.7%	76.1%	78.0%	90.4%	5.6%	73.5%
Sterling School District	78.0%	98.0%	0.0%	78.0%	87.8%	96.1%	2.0%	86.0%
Stonington School District	91.9%	95.2%	3.4%	88.7%	92.3%	94.2%	3.8%	88.7%
Stratford School District	85.2%	95.6%	2.6%	82.9%	84.7%	95.3%	3.2%	81.9%
Suffield School District	96.6%	99.0%	1.0%	95.6%	91.2%	99.0%	1.0%	90.3%
Thomaston School District	88.0%	97.9%	2.1%	86.2%	81.5%	97.9%	2.1%	79.8%
Thompson School District	85.1%	100.0%	0.0%	85.1%	82.3%	99.1%	0.0%	82.3%
Tolland School District	97.1%	98.0%	1.2%	95.9%	94.7%	98.4%	1.2%	93.6%
Torrington School District	83.8%	90.5%	6.4%	78.3%	85.3%	87.6%	9.5%	77.0%
Trumbull School District	96.0%	97.7%	0.7%	95.3%	97.0%	97.0%	1.6%	95.4%

District	Math				Reading			
	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised	%At/Above Proficient	% Partic. Standard CMT	% Partic. MAS	% At/Above Proficient Revised
Vernon School District	83.2%	95.4%	1.4%	82.0%	77.2%	95.0%	1.1%	76.3%
Voluntown School District	96.7%	96.8%	3.2%	93.6%	90.0%	96.8%	3.2%	87.1%
Wallingford School District	91.6%	96.3%	2.7%	89.1%	92.4%	96.7%	2.5%	90.1%
Waterbury School District	58.5%	89.4%	6.2%	54.7%	59.2%	87.8%	7.5%	54.5%
Waterford School District	94.0%	98.7%	0.8%	93.2%	92.4%	99.6%	0.0%	92.4%
Watertown School District	85.0%	93.0%	3.5%	81.9%	91.2%	92.2%	4.3%	87.1%
West Hartford School District	95.1%	94.0%	4.1%	91.1%	89.4%	92.0%	6.0%	83.9%
West Haven School District	73.6%	91.9%	4.8%	69.9%	74.3%	92.5%	5.2%	70.3%
Westbrook School District	98.7%	97.5%	2.5%	96.2%	94.8%	97.5%	2.5%	92.4%
Weston School District	95.5%	98.3%	0.0%	95.5%	96.6%	98.9%	0.0%	96.6%
Westport School District	99.5%	98.9%	0.0%	99.5%	96.8%	98.9%	0.0%	96.8%
Wethersfield School District	96.0%	93.2%	4.4%	91.7%	94.1%	92.5%	4.8%	89.5%
Wilmington School District	98.5%	98.6%	1.4%	97.1%	89.1%	92.8%	7.2%	82.7%
Wilton School District	99.7%	97.4%	1.7%	98.0%	97.4%	98.3%	0.9%	96.5%
Winchester School District	85.3%	90.3%	5.3%	80.6%	78.6%	91.2%	4.4%	75.0%
Windham School District	54.6%	89.1%	7.4%	50.4%	46.3%	88.3%	7.0%	42.9%
Windsor Locks School District	83.7%	94.0%	4.7%	79.7%	77.3%	94.0%	5.3%	73.2%
Windsor School District	88.6%	93.8%	3.5%	85.4%	83.3%	93.4%	4.2%	79.7%
Wolcott School District	99.0%	98.6%	1.4%	97.6%	92.7%	98.6%	1.4%	91.4%
Woodstock School District	96.8%	98.4%	0.0%	96.8%	93.6%	98.4%	0.0%	93.6%
ACES	73.2%	96.0%	2.6%	71.3%	72.3%	95.4%	3.0%	70.1%
Amistad Academy	98.1%	93.0%	5.3%	92.8%	86.8%	93.0%	5.3%	82.1%
CES	91.4%	100.0%	0.0%	91.4%	91.4%	100.0%	0.0%	91.4%
CREC	89.2%	97.3%	2.5%	87.0%	84.5%	96.5%	3.2%	81.8%
Elm City College Preparatory School	95.2%	91.3%	8.7%	86.9%	78.6%	91.3%	8.7%	71.8%
Integrated Day Charter School	93.1%	93.5%	3.2%	90.0%	90.0%	96.8%	3.2%	87.1%
Jumoke Academy	97.4%	97.4%	0.0%	97.4%	82.1%	100.0%	0.0%	82.1%
New Beginnings Inc., Family Academy	81.8%	95.7%	4.3%	78.3%	65.2%	100.0%	0.0%	65.2%
Odyssey Community School	87.1%	100.0%	0.0%	87.1%	87.1%	100.0%	0.0%	87.1%

Appendix H: Participation Rates in Grade 8 on Standardized Tests in CT: 2006-2011



Source: eMetric, *Data Interaction for CMT 4th Edition*, CT State Department of Education, 2011.