



Connecticut Mastery Test and Connecticut Academic Performance Test Cohort Analysis

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Bristol Improvement Plan: A Success Story

- **CMT**
 - At or slightly above state average in many grade levels and subtests
 - Cohorts made gains over time
- **CAPT**
 - Above state average in all subtests
 - Cohorts made gains over time
- **Cohort Analyses**
 - Tested using several methods confirming positive overall results

Outline

- **Bristol CMT and CAPT 2008, Same-Grade Analysis**
 - Comparison to Bristol 2007
 - Comparison to State 2008
- **Bristol Cohorts: Same-Student Analysis**
 - Bristol Growth Model Report
 - State Achievement Level Report
 - State Vertical Scale Scores Report **New*



Bristol CMT and CAPT 2008 Same-Grade Analysis

- Comparison to Bristol 2007**
- Comparison to State 2008**

CMT 2008 Percent At or Above Proficient Bristol vs. State





	Mathematics		Reading		Writing		Science	
	Bristol	State	Bristol	State	Bristol	State	Bristol	State
Grade 3	84.0*	80.7	69.0*	68.4	86.8*	82.9	NA	NA
Grade 4	77.8	81.5	66.0	69.7	80.1	84.8	NA	NA
Grade 5	82.1*	83.1	73.5*	74.0	86.0	85.7	81.0	81.1
Grade 6	85.6*	84.3	78.0*	77.6	77.3	82.9	NA	NA
Grade 7	85.0*	82.6	79.9*	79.7	76.7	80.1	NA	NA
Grade 8	83.1*	81.2	79.5*	77.0	80.6	82.7	77.8	75.2

Yellow = Exceeds State 2008 Average

*** Exceeded Bristol 2007 Average**

CAPT 2008 Percent At or Above Proficient

Bristol vs. State

	Mathematics		Science		Reading Across The Disciplines		Writing Across the Disciplines	
	Bristol	State	Bristol	State	Bristol	State	Bristol	State
Bristol	88.5*	79.7	87.9*	80.5	90.0*	82.7	91.1*	88.2
Male	86.6	80.6	86.1	80.5	85.2*	79.2	84.7*	84.2
Female	90.3*	78.7	89.6*	80.5	94.3*	86.2	96.9*	92.2
 Afr. Amer.	70.8	49.5	79.2*	52.9	80.9*	60.9	85.1*	75.0
 Hispanic	62.1	54.8	58.3	53.6	62.7	61.7	73.7*	72.4
White	93.1*	90.3	92.1*	91.2	93.9*	91.0	93.5*	93.7
 Econ. Disadv.	76.5*	53.4	75.4*	53.2	78.0*	60.4	79.2*	72.2
Full Price	91.8	88.3	91.4	89.5	93.3*	90.0	94.3*	93.4
 Special Ed.	50.8	43.5	47.0	47.1	37.5	47.3	47.6*	53.8
Not Special Ed.	93.0*	83.7	92.9*	84.3	96.1*	86.6	96.1*	92.0
Not ELL	89.2*	81.1	88.6*	82.3	90.4*	84.0	91.3*	89.5

Yellow = Exceeds State 2008 Average

*** Met or Exceeded Bristol 2007 Average**



Bristol Cohort Analysis

– Growth Model Report, 2008

Gains Analysis: Matched Cohorts

Hispanic, African American, and Economically Disadvantaged subgroups demonstrated **Moderate gains** in **Reading** in the 3 to 4 cohort.

Hispanic subgroup demonstrated **Moderate gains** in **Reading** in the 3 to 5 cohort.

		Gains Analysis
Grade 3 2007 to Grade 4 2008 (623 Students)	Math	Expected Gain
	Reading	Moderate Gain Beyond Expected
	Writing	Expected Gain
Grade 3 2006 to Grade 5 2008 (563 Students)	Math	Expected Gain
	Reading	Expected Gain
	Writing	Expected Gain

Gains Analysis: Matched Cohorts

Special Education subgroup demonstrated **Moderate gains** in **Reading** in the 4 to 6 cohort.

Special Education subgroup demonstrated **Moderate gains** in **Math** in the 5 to 7 cohort.

		Gains Analysis
Grade 4 2006 to Grade 6 2008 (603 Students)	Math	Expected Gain
	Reading	Expected Gain
	Writing	Expected Gain
Grade 5 2006 to Grade 7 2008 (531 Students)	Math	Expected Gain
	Reading	Expected Gain
	Writing	Moderate Loss Below Expected

Gains Analysis: Matched Cohorts

Special Education subgroup demonstrated **Moderate gains** in **Math, Reading, and Writing** in the 6 to 8 cohort.

All subgroups demonstrated **Moderate gains** in **Writing** in the 8 to 10 cohort.

		Gains Analysis
Grade 6 2006 to Grade 8 2008 (596 Students)	Math	Expected Gain
	Reading	Expected Gain
	Writing	Expected Gain
Grade 8 2006 to Grade 10 2008 (449 Students)	Math	Expected Gain
	Reading	Expected Gain
	Writing	Moderate Gain Beyond Expected



Bristol Cohort Analysis

**– State Achievement Level Report,
2008**

Achievement Level Cohort Summary, Comparison to Bristol 2006*

% At or Above Proficient, 2008		Total		Hispanic		African Amer.		Econ. Disadv.		Special Educ.	
Grade 3 2007* to 4	Math	79%	--	53%	-4	78%	+9	59%	-1	38%	-6
	Reading	67%	-1	51%	-1	63%	-4	51%	--	13%	-4
	Writing	81%	--	69%	+1	84%	+5	71%	+2	35%	+2
Grade 3 to 5	Math	85%	+2	73%	+3	79%	+1	76%	+4	59%	-2
	Reading	76%	+8	68%	+18	70%	+13	63%	+11	30%	-1
	Writing	89%	+3	85%	+8	86%	+3	83%	+6	56% ₁₂	+2

Achievement Level Cohort Summary, Comparison to Bristol 2006

% At or Above Proficient, 2008		Total		Hispanic		African Amer.		Econ. Disadv.		Special Educ.	
Grade 4 to 6	Math	89%	+2	74%	+12	73%	+1	81%	+2	51%	-7
	Reading	80%	+8	59%	+12	67%	+3	68%	+12	33%	+15
	Writing	80%	-5	56%	-10	75%	+5	66%	-9	31%	-17
Grade 5 to 7	Math	86%	+5	75%	+3	89%	+6	76%	+7	43%	-3
	Reading	82%	+7	69%	+12	83%	+9	74%	+11	28%	-4
	Writing	79%	-11	74%	-7	79%	-11	68%	-14	26%	-35

Achievement Level Cohort Summary, Comparison to Bristol 2006

% At or Above Proficient, 2008		Total		Hispanic		African Amer.		Econ. Disadv.		Special Educ.	
Grade 6 to 8	Math	86%	+4	74%	+11	84%	+21	76%	+7	34%	+11
	Reading	82%	+7	63%	+13	70%	+9	66%	+11	25%	+7
	Writing	82%	+2	74%	+5	72%	+2	67%	+2	24%	-4
Grade 8 to 10	Math	92%	+3	71%	+8	78%	+3	82%	+4	59%	+18
	Reading	92%	+7	70%	+8	89%	+10	81%	+15	45%	+17
	Writing	95%	+9	77%	+17	94%	+17	83%	+10	57%	+27



Bristol Cohort Analysis

**– New State Vertical Scale Scores
Report, 2008**

Vertical Scale Scores

- Newly developed by CSDE this year for Connecticut Mastery Test
- Measures growth across grades in Mathematics and Reading
- Levels of Understanding range from:
1 (limited knowledge/very limited ability) to
5 (extensive knowledge/exceptional ability)

Vertical Scale

Levels of Understanding

- **Math Range (1 to 5):** *Limited to extensive* knowledge of the assessed content areas, including basic number concepts, computation skills, measurement, ratio, proportion, and percent.
- **Reading Range (1 to 5):** *Very limited to exceptional* ability to read and respond to informational and literary texts
 - “Requires significant assistance” to “No assistance needed” to complete these tasks
 - Strategy use ranges from *none* to *sophisticated*

Cohort Highlights

State Vertical Scale Scores Report, 2008

Change in Levels of Understanding											
		Total		Hispanic		African Amer.		Econ. Disadv.		Special Educ.	
Grade 3 to 4	Math	1	2	1	1	1	2	1	2	1	1
	Reading	1	2	1	1	1	2	1	2	1	1
Grade 3 to 5	Math	1	3	1	2	1	3	1	3	1	2
	Reading	1	3	1	2	1	3	1	2	1	1
Grade 4 to 6	Math	2	4	2	3	2	3	2	3	1	2
	Reading	2	3*	1	2*	2	3	2	3	1	¹⁸ 2

Cohort Highlights

State Vertical Scale Scores Report, 2008

Change in Levels of Understanding											
		Total		Hispanic		African Amer.		Econ. Disadv.		Special Educ.	
Grade 5 to 7	Math	3	4	2	3*	2	3	2	3	2	2*
	Reading	3	4	2	3	3	4	2	3*	1	2
Grade 6 to 8	Math	3	4	3	4	3	4	2	4	2	3
	Reading	3	4	2	3*	3	4	2	3*	1	2*

Math Range (1 to 5): *Limited to extensive* knowledge of the assessed content areas, including basic number concepts, computation skills, measurement, ratio, proportion, and percent.

Reading Range (1 to 5): *Very limited to exceptional* ability to read and respond to informational and literary texts / Requires 19 *significant to no* assistance needed to complete these tasks / Strategy use ranges from *none to sophisticated*

Challenges

- Migration
- Economically Disadvantaged
- State NCLB Standards increased for 2008

Proficiency Targets	CMT			CAPT		
	2007	2008		2007	2008	
Reading	68%	79%	+11	72%	81%	+9
Math	74%	82%	+8	69%	80%	+11

Gains Analysis Cohort Summary

- **Bristol's Growth Model**

- Expected to Moderate gains in all content areas
 - Exception: Grade 5 to 7 cohort - moderate loss below expected in the area of writing

- **Achievement Levels**

- Gains in percents at or above proficient and goal in most cohorts
 - Exceptions: Grade 3 to 4 cohort – inconsistent gains, Grades 4 to 6 and 5 to 7 cohorts – decrease in writing

- **State Vertical Scale Score Analysis**

- Gains in all content areas

- **CAPT Performance**

- Cause for continued celebration!

Goals

- Continue path focused on high achievement for *all* students
- Invest in continued professional development
- Maximize opportunities for all students to attend a rigorous four-year college program
- Hire the best, brightest and most diverse staff possible
- Communicate Successes and Needs with all City Boards and Community At-Large

We Proved That *All Children Can Learn At High Levels*

- **Impact of Consistency in Education:**
 - Students who remain in Bristol schools for two or more years show tremendous academic growth.
- **Conclusion:**
 - High expectations, effective instructional programming, and outstanding staff are the keys to this success!