

Series 2002-2003
Circular Letter: C-19

TO: Superintendents of Schools

FROM: Theodore S. Sergi, Commissioner of Education

DATE: November 15, 2002

SUBJECT: Results from the 2002 Administration of the
Connecticut Academic Performance Test

Connecticut has a long history of setting high educational standards and then working to accomplish those goals. Each year, and over time, standardized assessments like the Connecticut Academic Performance Test (CAPT) and Connecticut Mastery Test (CMT) yield important information about progress toward these goals. Patterns and trends in the scores help schools and parents judge and address the progress of individual students as well as the overall effectiveness of district curriculum and instruction. For example, many schools have enhanced their writing program or filled gaps in their mathematics curriculum based on the results of statewide tests.

This report presents the statewide results from the 2002 administration of the CAPT. The standard CAPT was administered to 37,096 10th grade students in May, 2002. The 2002 CAPT marks the second year that the Second Generation CAPT has been administered to Grade 10 students, which means that comparisons can be made to the 2001 CAPT results.

While the CAPT, along with CMT, is a critical measure of the achievement of Connecticut's high schools and their students, many different indicators of success are important to our understanding of the accomplishments and needs of our students. As stated in a position statement of the State Board of Education adopted September 13, 2000, "*The Connecticut Mastery Test (CMT) and Connecticut Academic Performance Test (CAPT) results provide important information about student performance on a selected set of skills and competencies in mathematics, reading and writing in Grades 4, 6 and 8, and also science in Grade 10. However, these results do not provide a comprehensive picture of student accomplishments.*" Other measures include such things as how many students stay in school to graduate, how many students are taking more rigorous and demanding courses, and how many pursue higher education after high school. The State Board of Education and I urge you, your local board, staff, parents and the media to review these results in a larger context of those additional measures and achievements over time. Collectively, this information can help give direction to school improvement, and can focus discussions among staff, students and parents about how we can help students improve.

Highlights of 2002 CAPT Results

- Percentages of students reaching the state goal in the four content areas ranged from 43.2 percent in Science to 51.0 percent in Writing Across the Disciplines. Test takers in 2002 did more than two percentage points better than those in 2001 in Reading and Writing Across the Disciplines, and achievement was less than one percentage point lower in 2002 in Science and Mathematics.
- An additional 2,175 students on average participated in the standard CAPT compared to the average number of students participating in 2001. The average percentage of 10th grade students participating in the standard CAPT increased from 85.6 percent in 2001 to 88.0 percent in 2002. The rates of participation increased dramatically for special education students, students in bilingual education and English-as-a-Second-Language (ESL) programs, as well as for minority and high-poverty students.
- Statewide, the gaps in student achievement between minorities and non-minorities have improved slightly in Mathematics and Science and have increased slightly in Reading Across the Disciplines and Writing Across the Disciplines.
- Although the overall participation on the CAPT has improved, especially for special populations, there is still a need to ensure that all students participate in an assessment appropriate to their needs and that students who are absent are provided retesting opportunities. The average state percentage of students absent or without valid scores was 9.2 percent, but for special education students it was 17.3 percent, and for limited English proficient students it was 17.1 percent. These rates must be reduced significantly in the next few years. The new state statute requiring local graduation competencies will take effect for the class of 2006, who will be taking the CAPT in the spring of 2004. This should result in virtually every student participating in CAPT.

I. What was the performance of all 10th grade students in 2002?

The CAPT-2 is aligned with Connecticut's curriculum frameworks and provides information about how well students are performing with respect to important skills in the content areas of Reading Across the Disciplines, Writing Across the Disciplines, Mathematics and Science. In each content area, scale scores are calculated, which range from 100-400. A state goal has been established for each content area which represents a high level of achievement for tenth grade students. Table 1 presents the number and percentage of students who participated in each part of the CAPT along with the number and percentage of students scoring at or above the state goal. The participation rates represent the percentage of all 10th grade students who participated in the standard 10th grade CAPT.

Table 1: Statewide Results by Content Area for 2001 and 2002

CAPT Content Area	Number (%) Tested		Number (%) At Level 4 - Goal		Number (%) at Level 3 or Above		Number (%) at Level 1 - Intervention		Average Scale Score	
	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
Mathematics	33,260 (85.9)	35,099 (87.4)	14,847 (44.6)	15,464 (44.1)	25,601 (77.0)	27,262 (77.7)	3,527 (10.6)	3,395 (9.7)	250.5	250.3
Science	33,303 (86.0)	35,817 (89.2)	14,467 (43.4)	15,461 (43.2)	27,145 (81.5)	28,932 (80.8)	2,742 (8.2)	3,214 (9.0)	250.4	249.0
Reading Across the Disciplines	33,405 (86.2)	35,525 (88.5)	14,095 (42.2)	15,917 (44.8)	26,005 (77.8)	28,043 (78.9)	2,412 (7.2)	2,525 (7.1)	250.6	250.7
Writing Across the Disciplines	32,581 (84.1)	34,807 (86.7)	15,874 (48.7)	17,758 (51.0)	26,643 (81.8)	27,781 (79.8)	1,969 (6.0)	2,548 (7.3)	250.4	248.1

Some Major Findings from the 2002 CAPT Administration

Reading Across the Disciplines

- Participation in the standard Reading Across the Disciplines test increased from 86.2 percent of 10th grade students in 2001 to 88.5 percent in 2002.
- Even with this increased participation, the percentage of students scoring at or above the state goal increased from 42.2 percent to 44.8 percent, and the percentage of students scoring at the intervention level decreased from 7.2 percent to 7.1 percent.

Writing Across the Disciplines

- Participation in the standard Writing Across the Disciplines test increased from 84.1 percent of 10th grade students in 2001 to 86.7 percent in 2002.
- Even with this increased participation, the percentage of students scoring at or above the state goal increased from 48.7 percent in 2001 to 51.0 percent in 2002. The percentage of students scoring at the intervention level, however, increased from 6.0 percent to 7.3 percent.

Mathematics

- Participation in the standard Mathematics test increased from 85.9 percent of 10th grade students in 2001 to 87.4 percent in 2002.
- In 2002, an additional 617 students scored at or above the state goal, although the percentage of students scoring at or above the state goal decreased negligibly from 44.6 percent to 44.1 percent. The percentage of students scoring at the intervention level decreased from 10.6 percent to 9.7 percent.

Science

- Participation in the standard Science test increased from 86.0 percent of 10th grade students in 2001 to 89.2 percent in 2002.
- In 2002, an additional 994 students scored at or above the state goal, although the percentage of students scoring at or above the state goal decreased very negligibly from 43.4 to 43.2. The percentage of students scoring at the intervention level increased from 8.2 percent to 9.0 percent.

Another way to gauge the overall progress of students statewide is to examine the percentage of tested students who achieve the statewide goals on all four of the CAPT subtests. This year, 8794 students (23.7 percent) succeeded in reaching this mark, 890 more students than in 2001, compared to 11.8 percent in 1995. Further, the percentage of students not meeting the goal on any of the tests dropped slightly, from 37.4 percent in 2001 to 36.1 percent in 2002.

Table 2: Number (%) of Students At or Above State Goal

Number of Tests	2001	2002
All Four Tests	7,904 (22.6)	8,794 (23.7)
Only Three Tests	4,507 (12.9)	4,715 (12.7)
Only Two Tests	4,685 (13.4)	5,092 (13.7)
Only One Test	4,776 (13.7)	5,095 (13.7)
No Tests	13,042 (37.4)	13,400 (36.1)

II. What was the performance and participation of 10th grade students across ERGs?

Table 3 present CAPT results for 2001 and 2002 by Education Reference Group (ERG)

Table 3: CAPT Results and Participation Rates by ERG for 2001 and 2002

ERG	Year	Mathematics		Science		Reading Across the Disciplines		Writing Across the Disciplines	
		% At or Above Goal	Participation Rate	% At or Above Goal	Participation Rate	% At Or Above Goal	Participation Rate	% At Or Above Goal	Participation Rate
A	2001	74.3	94.4	73.4	94.6	75.2	94.6	79.0	94.2
	2002	75.4	96.5	71.2	97.0	75.1	96.8	76.5	95.9
B	2001	62.8	91.0	61.4	91.0	61.6	91.9	64.5	90.7
	2002	65.0	93.1	60.3	93.1	63.9	93.2	67.8	92.1
C	2001	59.2	93.4	61.1	93.5	61.2	93.3	61.8	92.9
	2002	60.1	93.5	62.0	94.4	60.0	94.2	63.9	93.1
D	2001	53.5	89.5	50.7	89.5	48.1	90.2	57.9	88.5
	2002	52.3	90.2	52.3	91.8	52.5	91.7	62.0	90.1
E	2001	45.7	92.2	47.4	92.1	45.3	92.1	50.4	90.4
	2002	45.7	94.3	48.9	95.1	47.1	93.9	56.7	92.4
F	2001	42.9	87.3	41.4	87.2	37.7	88.7	46.8	85.9
	2002	41.5	88.2	41.8	89.0	42.5	89.7	52.2	86.6
G	2001	37.4	89.6	37.0	89.7	32.2	90.1	41.5	87.3
	2002	37.7	90.8	35.8	91.9	36.9	91.4	45.1	89.4
H	2001	37.1	80.6	34.8	79.9	33.5	79.9	43.5	76.4
	2002	33.7	83.1	33.3	85.4	36.0	84.0	42.3	81.1
I	2001	14.5	68.2	14.1	68.7	16.9	68.1	22.7	65.1
	2002	13.7	71.4	14.8	75.8	19.8	72.9	24.4	72.2
VT	2001	13.9	91.4	13.2	93.8	7.6	93.0	11.3	90.9
	2002	12.1	91.4	14.1	95.5	10.1	94.1	14.3	92.1
State	2001	44.6	85.9	43.4	86.0	42.2	86.2	48.7	84.1
	2002	44.1	87.4	43.2	89.2	44.8	88.5	51.0	86.7

Table 3 shows a typical pattern of decreasing performance as data are reviewed from ERG A to ERG I. Patterns of participation may, however, be the more interesting story. While participation increases are evident across ERGs, there are notably greater increases in participation in ERGs H and I. These school districts should be commended for their efforts to include greater numbers of their students in the CAPT; however, these same districts are still the furthest from meeting state and federal expectations for test participation. It is critical that the reader keeps in mind the increased participation of students from ERGs H and I when making comparisons of CAPT results from 2001 to 2002.

The Regional Vocational-Technical School System has participation rates among the highest statewide, and although their results are among the lowest in the state, they have made improvement in three of the four content areas from 2001 to 2002.

III. What do we know about the long-term trend in CAPT performance?

Table 4 presents the statewide long-term trend in CAPT results from 1995 through 2002. In interpreting these results, it is important to keep in mind that they span two generations of the CAPT. Between the 2000 CAPT administration of CAPT-1 and the 2001 administration of CAPT-2, there were revisions to the content of the test, the manner in which test components were combined and the standards against which student performance was interpreted. However, Table 4 can serve as an historical record of the percentage of students from the beginning of CAPT who achieved the state goals on the subject areas that were assessed across those years.

Table 4: Percent of Students at or Above Goal Across Generations: 1995 - 2002

	Generation 1							Generation 2	
	1995	1996	1997	1998	1999	2000		2001	2002
Mathematics	37.9	41.0	41.6	43.7	43.1	45.3	Mathematics	44.6	44.1
Science	32.3	34.1	35.5	35.5	38.0	37.3	Science	43.4	43.2
Language Arts	30.6	35.1	35.0	35.2	39.2	37.9	Reading Across the Disciplines	42.2	44.8
Interdisciplinary	38.1	35.7	37.9	38.4	42.3	46.2	Writing Across the Disciplines	48.7	51.0

IV. How have participation rates changed?

More of Connecticut's 10th grade students participated in last spring's administration of the CAPT than at any time since the exam was first given in 1994. In the last two years, average participation rates across content areas increased from 85.6 percent to 88.0 percent. This was due in large part to increased academic accountability requirements for English language learners and special education students brought about by recent federal and state legislation, and a general growing focus on leaving no child behind. This increased emphasis on inclusion is meant to guarantee equal educational opportunities for all students.

Table 5 shows the number and percentage of all 10th graders in different categories of participation and non-participation for 2001 and 2002. These data show that an average of 548 fewer students were exempted in 2002 due to limited English proficiency, and that 15 fewer special education students took an out-of-level version of the CAPT. These students account for a sizable portion of the increase in the rate of participation in the standard CAPT. Given the fact that many more students with special learning needs took the rigorous 10th grade test, it is encouraging to see steady results in scores statewide.

Table 5: Participation Status of 10th Grade Students in CAPT 2001 and 2002

PARTICIPATION STATUS	Year	Mathematics	Science	Reading Across the Disciplines	Writing Across the Disciplines
		Number (%)	Number (%)	Number (%)	Number (%)
Standard CAPT	2001	33,260 (85.9)	33,303 (86.0)	33,405 (86.2)	32,581 (84.1)
	2002	35,099 (87.4)	35,817 (89.2)	35,525 (88.5)	34,807 (86.7)
Out-of-Level CAPT	2001	647 (1.7)	757 (2.0)	613 (1.6)	608 (1.6)
	2002	643 (1.6)	705* (1.8)	610 (1.5)	607 (1.5)
Skills Checklist	2001	280 (0.7)	280 (0.7)	280 (0.7)	280 (0.7)
	2002	292 (.7)	292 (.7)	292 (.7)	292 (.7)
Exempt	2001	772 (2.0)	773 (2.0)	776 (2.0)	775 (2.0)
	2002	226 (.6)	227 (.6)	224 (.6)	226 (.6)
Absent	2001	3,734 (9.6)	3,598 (9.3)	3,539 (9.1)	4,320 (11.2)
	2002	3,853 (9.6)	3,093 (7.7)	3,352 (8.3)	4,032 (10.0)

* An Out-of-level Science test was not available for these students.

The new federal law, *No Child Left Behind Act of 2001*, requires that 95 percent of all students (except those LEP students who are exempt) participate in a state assessment: standard, out-of-level or CMT/CAPT Skills Checklist. If a district has more than 5 percent of its students absent with no test makeup, they will not meet this requirement. In ERG I, absentee rates average 20.5 percent, far exceeding the federal target.

While most school districts have found ways to motivate their students with attendance incentives and test score rewards, other districts appear to be struggling with attendance during testing. Encouraging more students to come to school during the testing period, and give the tests their best efforts, is a challenge that will take on even greater importance now that the state is expected to comply with the federal mandates of the *No Child Left Behind Act of 2001*.

The CAPT should be seen as an educational resource to which all children should have access. The information educators and parents obtain about individual student and school needs can be very helpful in improving student achievement.

V. What was the performance and participation of special populations?

In keeping with national and state efforts to equalize access to educational opportunities, school districts are taking measures to increase student participation in the annual statewide testing so that at least 95 percent of all public school students in the state are included in the assessment program. This goal of 95 percent participation applies to various subgroups of students as well.

Special Education Results and Participation

One such effort focuses on special education students whose learning disabilities, social/emotional disorders, physical or cognitive impairments have been viewed in the past as justifiable reasons for exempting them from yearly academic testing. Beginning with the 2000-2001 school year, districts were required to include all special education students in either the

standard CAPT or, when appropriate, an alternate assessment rather than excluding them from the testing program altogether. Guidelines issued by the State Department of Education urged districts to administer the standard 10th grade test to at least 80 percent of their special education students, and to limit the number of students taking a lower-grade level test or a Skills Checklist to just 20 percent. As a result, the 2002 CAPT administration included more special education students taking the standard version of the exams than ever before. Table 6 displays CAPT participation information for special education students in 2001 and 2002. Although the special education participation rate on the standard CAPT improved from 2001 to 2002 from 61.8 percent to 64.0 percent, it falls short of the 80 percent expectation.

Table 6: Statewide CAPT Participation Data for Special Education Students 2001 and 2002

YEAR	Number of Grade 10 Students	Number (%) of Grade 10 Students Identified by the District as Enrolled in Special Education	Average Number (%) of Special Education Students in Standard CAPT	Average Number (%) of Special Education Students in Standard, Out-of-Level or Skills Checklist	Average Number (%) of Special Education Students Absent from Testing
		Number (%)	Number* (%)	Number* (%)	Number* (%)
2001	38,735	4,583 (11.8)	2,832 (61.8)	3,768 (82.2)	785 (17.1)
2002	40,156	4,992 (12.5)	3,196 (64.0)	4,130 (82.7)	831 (16.6)

*rounded to the nearest whole number

Table 7: Results and Participation Rates for Special Education Students in Standard CAPT 2001 and 2002

CAPT Content Area	Year	% At Or Above Goal	Average Scale Score	Participation Rate
Mathematics	2001	14.2	209.7	61.7
	2002	13.4	210.3	61.9
Science	2001	15.2	214.3	62.9
	2002	14.4	211.7	67.3
Reading Across the Disciplines	2001	10.1	207.7	63.0
	2002	11.7	207.7	64.9
Writing Across the Disciplines	2001	13.1	207.5	59.6
	2002	14.6	203.0	62.0

While average scores increased slightly in Mathematics and remained constant in Reading Across the Disciplines among special education students, scores fell in Science and Writing Across the Disciplines compared with last year's results. In addition, participation rates for special education students, even at 61.9 percent to 67.3 percent, are short of the state target of 80 percent participation on the standard test.

As much as possible, these learners with special needs receive instruction in regular classrooms with accommodations to help them learn alongside their non-disabled peers. Statewide, there is a need to continue to increase the number of special education students included in the standard CAPT to ensure access and equity, raise academic expectations and enhance achievement. The role of each school district and school is to continue to ensure that special education students have the same opportunities to learn the same curriculum as their non-disabled peers.

Bilingual/ESL Results and Participation

Also included in the testing process for the first time this year are the test scores of hundreds of students with limited English proficiency who have attended Connecticut high schools for more than ten months. In previous years, students enrolled in bilingual education or English as a Second Language programs were not required to take the CAPT until they had completed three years of Connecticut schooling. This year, about 558 bilingual education and ESL students took the standard CAPT exam; more than four times as many as in 2001.

Table 8: Statewide CAPT Participation Data for Bilingual/ESL Students 2001 and 2002

Year	Number of Grade 10 Students	Number (%) of Grade 10 Students Identified by the District as Enrolled in Bilingual/ESL	Average Number (%) of Bilingual/ESL Students Participating in Standard CAPT	Average Number (%) of Bilingual/ESL Students Exempt from Testing	Average Number (%) of Bilingual/ESL Absent from Testing
		Number (%)	Number* (%)	Number* (%)	Number* (%)
2001	38,735	937 (2.4)	121 (12.9)	774 (82.6)	33 (3.5)
2002	40,156	951 (2.4)	558 (58.6)	226 (23.7)	151 (15.9)

*rounded to the nearest whole number

Table 9 shows the results and participation rates for the newly expanded group of limited-English proficient students who took the CAPT this year. In light of such dramatic increases in the participation of students who have had limited exposure to English, it is not surprising to see a corresponding decrease in the performance of these students as a group.

Table 9: Results and Participation Rates for Limited English Proficient Students 2001 and 2002

CAPT Content Area	Year	% At or Above Goal	Average Scale Score	Participation Rate
Mathematics	2001	13.4	205.5	13.6
	2002	7.4	193.8	57.1
Science	2001	9.7	202.2	13.2
	2002	3.3	187.3	64.0
Reading Across the Disciplines	2001	9.3	196.8	12.6
	2002	2.6	187.5	56.4
Writing Across the Disciplines	2001	18.1	208.6	12.4
	2002	4.6	185.3	57.0

VI. Are the achievement gaps closing?

Nearly one-fourth of the 37,096 high school sophomores tested in 2002 reached the state goal on all four content areas tested. This indicates that many students are achieving at exceptionally high levels. However, when this year's CAPT results are analyzed by subgroups such as race/ethnicity, poverty and gender, troubling disparities in achievement persist. For example:

- More than 50 percent of white and Asian students met the state goal in Reading Across the Disciplines, compared with 15.2 percent of black and 17.6 percent of Hispanic 10th graders.

- In Mathematics, just 12.5 percent of low-income students reached the goal, while 48.9 percent of higher-income students made the mark.
- The percentage of females achieving the state goals in Reading and Writing Across the Disciplines exceeded that of males by 15 to 20 percentage points; and males continued to outperform females in Mathematics and Science.

Tables 10 through 12 present results by race/ethnicity, poverty level and gender for the 2001 and 2002 test administrations.

Table 10: Statewide Results and Participation Rates by Race/Ethnicity 2001 and 2002

		Black (n=4,281 in 2001) (n=5,035 in 2002)			White (n=26,500 in 2001) (n=29,088 in 2002)			Hispanic (n=4,199 in 2001) (n=4,541 in 2002)		
		% at or Above Goal	Average Scale Score	Participation Rate	% at or Above Goal	Average Scale Score	Participation Rate	% at or Above Goal	Average Scale Score	Participation Rate
Mathematics	2001	11.0	209.0	74.8	53.2	260.5	91.5	13.8	215.5	68.6
	2002	9.6	210.8	76.1	52.8	260.2	91.6	11.9	214.7	72.8
Science	2001	10.5	211.0	74.5	51.8	260.1	91.5	13.1	215.6	69.6
	2002	10.8	211.3	80.2	52.0	259.3	92.6	12.5	212.5	77.1
Reading Across the Disciplines	2001	14.6	220.2	74.6	49.5	258.7	92.0	14.6	219.3	69.4
	2002	15.2	219.5	78.8	52.5	259.0	92.3	17.6	220.3	74.5
Writing Across the Disciplines	2001	20.4	221.6	70.4	56.1	257.9	90.3	19.9	221.2	66.3
	2002	21.9	217.4	76.2	58.8	256.4	90.7	21.4	215.5	72.4

While the achievement gaps statewide between black, Hispanic and white students did not significantly change from 2001 to 2002, there were significant increases in the percentage of minority students being tested. For black students, participation increased by an average of just over 4 percent. For Hispanic students, participation increased by an average of over 5 percent. This is significantly higher than the increase in participation rates among white students which averaged less than .5 percent. It is encouraging, but certainly not satisfying, that results for minority students remained steady even with the large increases in students being tested. Asian students continued to outperform other groups with 50.2 percent to 61.4 percent achieving the state goal across the various sections of the test.

Table 11: Statewide Results and Participation Rates by Poverty Level 2001 and 2002

		ELIGIBLE F/R LUNCH (n=6,373 in 2001) (n=6,300 in 2002)			NOT ELIGIBLE F/R LUNCH (n=32,362 in 2001) (n=33,856 in 2002)		
		% at or Above Goal	Average Scale Score	Participation Rate	% at or Above Goal	Average Scale Score	Participation Rate
Mathematics	2001	13.4	213.8	71.3	49.6	256.3	88.7
	2002	12.5	215.2	73.9	48.9	255.7	89.9
Science	2001	12.7	214.3	72.7	48.4	256.2	88.6
	2002	13.3	213.3	78.2	47.9	254.7	91.2
Reading Across the Disciplines	2001	13.5	217.6	72.0	46.8	255.8	89.1
	2002	16.2	218.5	76.1	49.3	255.7	90.8
Writing Across the Disciplines	2001	18.9	219.8	69.0	53.4	255.2	87.1
	2002	21.0	215.3	74.2	55.7	253.2	89.0

Table 11 shows that the test scores for students eligible for free or reduced price lunch sometimes increased and sometimes decreased from 2001 to 2002. For example, 16.2 percent of students scored at or above goal in Reading Across the Disciplines in 2002 compared to 13.5 percent in 2001. Similar increases were seen in Writing Across the Disciplines. Test participation rates for students eligible for free or reduced price lunch increased by an average of 4.3 percent over last year. This was significantly higher than the increase in average participation rates (1.8 percent) among students not eligible for free or reduced price lunch.

Table 12: Statewide Results and Participation Rates by Gender 2001 and 2002

		FEMALE (n=19,133 in 2001) (n=19,643 in 2002)			MALE (n=19,602 in 2001) (n=20,513 in 2002)		
		Percent at/above Goal	Average Scale Score	Participation Rate	Percent at/above Goal	Average Scale Score	Participation Rate
Mathematics	2001	43.0	249.0	88.2	46.3	252.0	83.6
	2002	41.0	248.0	90.0	47.2	252.6	84.9
Science	2001	39.8	247.3	88.2	47.2	253.6	83.8
	2002	39.8	246.4	91.1	46.5	251.6	87.3
Reading Across the Disciplines	2001	50.4	259.5	88.7	33.7	241.4	83.8
	2002	52.5	259.5	90.9	37.0	241.7	86.1
Writing Across the Disciplines	2001	58.7	261.3	86.9	38.3	239.1	81.4
	2002	61.1	259.4	89.6	40.7	236.5	83.9

Table 12 shows that achievement gaps remain between male and female students. Female students continue to outperform male students in Reading Across the Disciplines (52.5 percent at or above goal for females compared to 37.0 percent for males) and in Writing Across the Disciplines (61.1 percent at or above goal for females compared to 40.7 percent for males). Male students again outperformed females in Mathematics (47.2 percent at or above goal for males compared to 41.0 percent for females) and Science (46.5 percent at or above goal for

males compared to 39.8 percent for females). In addition, the gap in participation rates among male and female students persists. Female participation rates averaged 90.4 percent across the four content areas and only 85.6 percent for males.

VII. What is being done to improve CAPT Performance?

The achievement gaps in Connecticut continue to be troubling. Local, state and federal resources must be more focused on activities that reduce the gap: more preschool opportunities, earlier intervention, after-school and summer school, more instructional time, more one-to-one reading assistance, and more parent training and support. In recent years, many school districts have focused their efforts on closing these achievement gaps, and there are many encouraging success stories that need to be told. Urban districts, for example, have improved students' reading skills through the use of intensive remediation strategies. Increased hours of daily instruction in reading and mathematics, Saturday sessions and summer school have begun to translate into better readers and improvements on the CMT and CAPT tests. The following table shows the increase in the percentage of ERG I high schools offering supplemental instructional service programs in mathematics or English language arts.

Table 13: ERG I High Schools Offering Supplemental Instructional Services 2000 and 2001

	2000		2001	
	Mathematics	English Language Arts	Mathematics	English Language Arts
Pull-out Remedial Instruction	8.7%	13.0%	13.0%	13.0%
In-class Tutorial	17.4%	17.4%	26.1%	21.7%
After School Program	30.4%	34.8%	56.5%	60.9%
Summer School	39.1%	43.5%	52.2%	52.2%
Other Programs	13.0%	13.0%	13.0%	21.7%
No Supplemental Services	52.2%	43.5%	26.1%	17.4%

Bulkeley High School

At one urban school in particular, participation rates and scores on the test increased across the board. Students at Bulkeley High School in Hartford increased the percentage of students at or above the statewide goal by an average of more than six percentage points from 2001 to 2002 while testing significantly more students (see Table 14 below). The most dramatic increases occurred in the results for Reading Across the Disciplines with 18.6 percent scoring at or above goal and in Writing Across the Disciplines with 26.8 percent scoring at or above goal.

Table 14: Hartford’s Bulkeley High School Results and Participation Rates in Standard CAPT 2001 and 2002

CAPT Content Area	Year	Average Scale Score	% at Goal	Participation Rate
Mathematics	2001	207.6	6.4	59.8
	2002	212.6	6.8	80.1
Science	2001	206.1	7.9	63.1
	2002	210.6	8.7	83.2
Reading Across the Disciplines	2001	209.2	7.6	59.5
	2002	221.6	18.6	80.1
Writing Across the Disciplines	2001	213.4	14.5	55.7
	2002	221.0	26.8	81.0

The improvement of CAPT participation rates and achievement results at Bulkeley High School began, in part, as a Hartford districtwide initiative to have each Hartford high school develop and implement a CAPT improvement plan. The Bulkeley High School CAPT Improvement Plan was developed by the school principal, other school administrators, lead teachers in mathematics, English, history and science and school guidance counselors. Initial steps in the development of this plan included a comprehensive analysis of CMT and CAPT results from prior years – disaggregated by age, race, ethnicity, gender, teacher, student course selection in the four content areas and student attendance patterns. Specific improvement efforts focused on the following:

- creating a “climate of seriousness” concerning the CAPT – school guidance and career counselors met with each tenth grade student to discuss the connection between the CAPT and future plans, including higher education and employment opportunities; students in Grades 11 and 12 who showed limited success on the CAPT in prior years were encouraged to retake the test;
- infusing Reading for Information and writing strategies into the core content areas, including bilingual content materials; providing more opportunities for experimentation in a lab setting for students in general biology courses; implementing a new Civics curriculum with related performance assessments; expanding the Direct Instruction reading program to include tenth grade students who needed this intervention;
- incorporating supplemental CAPT curriculum into the content areas and bilingual content materials; establishing CAPT review sessions; and
- improving school oversight of student attendance – establishing a Dean of Attendance, requiring more frequent parent/school contact regarding student absences, and offering incentives for perfect attendance.

During the 2002 CAPT administration, administrators more closely monitored student participation to ensure that students who were absent took portions of the test during “make-up” days. Overall, the Bulkeley administration attributes student success as measured by the CAPT to its collective effort to improve school climate, basic skills, curriculum, instruction, and student attendance.

VIII. How will CAPT be used in graduation expectations?

When the Connecticut state legislature established the CAPT, it clearly specified that it should not be used as the sole criterion for graduation. While that condition still remains, **new legislation (PA 01-166) passed in the summer of 2001, does give CAPT a role in determining students' readiness for graduation from high school.**

As of September 1, 2002, each local board of education has specified the basic skills necessary for graduation beginning with the class of 2006, which include a process to assess the competency levels of students in such skills. **The assessment criteria must include, but not be exclusively based on, results from the 10th-grade CAPT.** It is the responsibility of each local board of education to specify each basic skill, identify how it will be assessed and also determine the level or standard of performance required for graduation.

About the Test

The CAPT is a comprehensive, cumulative assessment of students' abilities to apply the knowledge and skills they have learned over their years in school. The state goal for each test represents a demanding level of achievement reasonable to expect of students in the spring of the 10th grade. First given in 1994, the CAPT differs from traditional multiple-choice formats that required students to memorize and recall trivial information. To be successful on the CAPT, students must use the knowledge and skills they have learned over many years to solve problems, acquire and analyze information, draw conclusions and communicate effectively in writing. Each year, committees of Connecticut educators participate in the development of the four tests that comprise the CAPT:

- The **Mathematics** test requires students to answer open-ended and grid-in questions that require the application of important mathematics concepts and skills in four major areas: Number & Quantity; Geometry & Measurement; Statistics, Probability & Discrete Mathematics; and Algebra & Functions.
- The **Science** test requires students to answer multiple-choice and short-essay questions to describe or explain important concepts in Life, Physical and Earth Science. Students also demonstrate their ability to collect and analyze data by designing and conducting a laboratory experiment.
- The **Reading Across the Disciplines** test consists of two sections: 1) Response to Literature in which students read a short story and respond in writing to four open-ended questions asking for interpretation and evaluation of the story and 2) Reading for Information in which students read nonfiction articles and respond to multiple-choice and open-ended questions asking for interpretation and analysis of the articles.
- The **Writing Across the Disciplines** test consists of 1) two Interdisciplinary Writing tests in which students read nonfiction articles about an important issue and write a persuasive letter in which they take and defend a position and 2) an Editing & Revising test in which students

read passages of student writing and answer multiple-choice questions focusing on errors in organization, word choice, syntax, capitalization, punctuation, usage and spelling.

Each of the four tests is scored on a scale from 100 to 400. The State Board of Education, with the recommendation of committees of educators, established the score ranges for four different performance levels. From highest to lowest these are: Level 4 - Goal, Level 3, Level 2, and Level 1 - Intervention. Students who do not meet the state goal scores can retake the tests in 11th or 12th grade. For future CAPT administrations, spring 2003 and thereafter, new standards and levels of performance (Advanced and Proficient) will be used as a result of the new federal reporting requirements outlined in the No Child Left Behind Act. See Commissioner Sergi's circular letter dated June 12, 2002 for more information, www.state.ct.us/sde, under "Commissioner".