

Series 2001-2002  
Circular Letter – C-13

TO: Superintendents of Schools

FROM: Theodore S. Sergi, Commissioner of Education

DATE: December 19, 2001

SUBJECT: Results From the 2001 Administration of the Connecticut Academic Performance Test

This report presents the statewide results from the 2001 administration of the Connecticut Academic Performance Test (CAPT). The test was administered to approximately 40,000 high school students statewide in May 2001. **The 2001 CAPT marks the first year that the Second Generation CAPT [CAPT-2] was administered to Grade 10 students. The 2001 CAPT-2 results provide a new baseline for student achievement in Connecticut's high schools.** Given changes in state and federal legislation, more students will be participating in the CAPT-2 than did in the CAPT-1 in previous years. CAPT-2 reports will include much more detailed information, including subscores for content strands in mathematics and science and results for subgroups of students (e.g., gender and race/ethnicity). The district and state reports have also been enhanced to include additional information to help parents, teachers, principals, curriculum coordinators and superintendents better understand student 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."*

#### Highlights of CAPT Results 2001

- Achievement consistently improved through the first generation of CAPT (1995-2000), and further, in 2001, the bridge study (see page 5) supports the conclusion that the **2001 test takers did slightly better than the 2000 test takers, particularly in writing and reading, with equal results in science and slightly lower achievement in mathematics.** Furthermore, more students met or exceeded the very challenging standard of scoring at or above the goal across all four tests (from 15.4% in 2000 to 22.6%).
- The achievement gap began to close during the first generation of CAPT, and students in Education Reference Group (ERG) I had larger improvement gains from 1995-2000 than the state as a whole (see Table 5). CAPT-2 provides a new baseline for measuring growth, and an **opportunity for a more rapid closing of the gap during 2001-2005.**

- Although the participation rate of special education students taking the state test and overall participation on all tests has improved, 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 state percentage of students absent or with no valid scores was 10.1 percent but for special education students it was approximately 18 percent; both of these rates should be reduced significantly in the next few years.
- **The real value of the CAPT results is that districts and schools use the data to make changes in curriculum and instruction that ensure progress toward the goal of improved achievement for all students.**

## I. What was the performance of 10<sup>th</sup> graders in 2001?

The CAPT-2 is aligned with Connecticut’s new curriculum frameworks and provides information about how well students are performing with respect to important skills in the content areas of Mathematics, Science, Reading Across the Disciplines, and Writing Across the Disciplines. In each content area, scale scores were calculated, which can range from 100 – 400. A state achievement goal, as well as two other standards below the goal, has been established based on the scale scores, resulting in four performance levels. Students scoring at or above the state goal have demonstrated a high level of achievement in the specific content area, and students who reach or exceed the goal in all four content areas have demonstrated meritorious performance (see page 4). Table 1 presents the percentage of students scoring in each of the four performance levels as well as averages based on the scale scores.

**TABLE 1  
2001 STATE RESULTS BY CONTENT AREA**

Content Area	Scale (100-400)	State Goal	Average Scale Score	Percent of Students by Performance Level			
				Level 4 At/Above Goal	Level 3	Level 2	Level 1 Intervention
Mathematics	100-400	261	250.5	44.6	32.3	12.4	10.6
Science	100-400	261	250.4	43.4	38.1	10.3	8.3
Reading Across the Disciplines	100-400	258	250.6	42.2	35.7	14.9	7.2
Writing Across the Disciplines	100-400	250	250.4	48.7	33.1	12.2	6.0

Some major findings from the 2001 CAPT administration in **Mathematics** are as follows:

- In 2001, 44.6 percent of 10th graders scored at or above the state goal in Mathematics, and a total of 76.9 percent scored within the top two bands; 10.6 percent scored in the intervention level.
- On a scale of 0-12, the state average scores in each of the mathematics content strands were as follows: Number & Quantity (5.6), Geometry & Measurement (4.9), Statistics & Probability (6.1) and Algebra & Functions (6.0).

- Of all Connecticut 10<sup>th</sup> graders in 2000-2001, 85.8 percent participated in the standard 10<sup>th</sup> grade CAPT Mathematics assessment.

Some major findings from the 2001 CAPT administration in **Science** are as follows:

- In 2001, 43.4 percent of 10th graders scored at or above the state goal in Science, and a total of 81.5 percent scored within the top two bands; 8.3 percent scored in the intervention level.
- On a scale of 0-19, the state average scores in each of the science content strands were as follows: Life Science (12.0), Physical Science (10.6) and Earth Science (10.6). An additional reporting area, which is an integral part of all scientific study, is Experimentation. On a scale of 0-16, the state average score in Experimentation was 8.8.
- Of all Connecticut 10<sup>th</sup> graders in 2000-2001, 86.0 percent participated in the standard 10<sup>th</sup> grade CAPT Science assessment.

Some major findings from the 2001 CAPT administration in **Reading Across the Disciplines** are as follows:

- In 2001, 42.2 percent of tenth graders scored at or above the state goal in Reading Across the Disciplines, and a total of 77.9 percent scored within the top two bands; 7.2 percent scored in the intervention level.
- On a scale of 0-24, the state average score on the Reading for Information test was 13.7, and on a scale of 2-12, the state average holistic score on Response to Literature was 7.7.
- Of all Connecticut 10<sup>th</sup> graders in 2000-2001, 88.0 percent participated in the standard 10<sup>th</sup> grade CAPT Response to Literature test, and 88.0 percent participated in the standard 10<sup>th</sup> grade Reading for Information test. This resulted in combined participation across the two components of Reading Across the Disciplines of 86.2 percent

Some major findings from the 2001 CAPT administration in **Writing Across the Disciplines** are as follows:

- In 2001, 48.7 percent of 10th graders scored at or above the state goal in Writing Across the Disciplines, and a total of 81.8 percent scored within the top two bands. Only 6.0 percent scored in the intervention level.
- On a scale of 2-12, the state average holistic score on the first Interdisciplinary Writing test was 7.4, and on the second Interdisciplinary Writing test it was 7.5. On a scale of 0-18, the state average score in Editing & Revising was 12.5.
- Of all Connecticut 10<sup>th</sup> graders in 2000-2001, 88.2 percent participated in the first Interdisciplinary Writing test, 87 percent participated in the second Interdisciplinary Writing test, and 88 percent participated in the Editing & Revising test. This resulted in a combined participation rate across the three components of Writing Across the Disciplines of 84.1 percent

Another way to look at the CAPT performance of 10th graders is according to the percentages of students who achieved at or above the state goal in various numbers of content areas. In the four major content areas (Mathematics, Science, Reading Across the Disciplines, and Writing Across the Disciplines), Table 2 shows the percentage of 10<sup>th</sup> graders who scored at or above the state goal and the percentage of 10<sup>th</sup> graders who scored in the top two levels (Level 3 and At or Above Goal). **In summary, 22.6 percent of all 10th graders scored at or above the state goal, and 60 percent scored at or above Level 3 on all four tests**

**TABLE 2  
PERCENT OF STUDENTS AT OR ABOVE STATE GOAL  
AND AT OR ABOVE LEVEL THREE AND GOAL**

Number of Tests	Percentage of Students At or Above State Goal (Level 4)	Percentage of Students At or Above Level 3
All Four Tests	22.6	60.0
Three Tests	12.9	12.0
Two Tests	13.4	9.1
One Test	13.7	7.7
No Tests	37.4	11.2

Table 3 shows an analysis of 2001 CAPT results for 10<sup>th</sup> graders by Educational Reference Groups (ERGs). Examination of the data shows a gradual decrease in achievement based on socioeconomic status – with the most significant difference between ERG H and ERG I. Whereas the percentage of the students in ERG H achieving at or above the state goal ranged from 33.5 percent to 43.5 percent, the percentage of ERG I students achieving at or above the goal ranged only from 14.1 percent to 22.7 percent. The state mean scale score of approximately 250 on each test was exceeded by all ERGs except G, H and I, with ERG I discernibly lower.

**TABLE 3  
2001 CAPT RESULTS BY EDUCATIONAL REFERENCE GROUP (ERG)**

	Mathematics		Science		Reading Across the Disciplines		Writing Across the Disciplines	
	Mean Scale Score	Percent Above Goal	Mean Scale Score	Percent Above Goal	Mean Scale Score	Percent Above Goal	Mean Scale Score	Percent Above Goal
ERG A	279.2	74.3	281.3	73.4	284.5	75.2	283.8	79.0
ERG B	269.3	62.8	269.1	61.4	270.1	61.6	267.0	64.4
ERG C	266.0	59.2	269.7	61.1	270.2	61.2	262.9	61.8
ERG D	260.3	53.5	259.1	50.7	258.0	48.0	259.4	57.9
ERG E	253.7	45.7	257.3	47.4	254.1	45.3	251.7	50.4
ERG F	250.3	42.9	249.6	41.4	247.6	37.7	248.3	46.8
ERG G	247.5	37.4	245.0	36.8	243.0	32.1	241.5	40.8
ERG H	243.4	37.1	241.3	34.8	242.0	33.5	244.4	43.5
ERG I	215.3	14.5	216.4	14.1	223.1	16.9	223.7	22.7
<b>STATE</b>	<b>250.5</b>	<b>44.6</b>	<b>250.4</b>	<b>43.4</b>	<b>250.6</b>	<b>42.2</b>	<b>250.4</b>	<b>48.7</b>

The CAPT is a demanding assessment of critical skills students need for success in the workplace and in higher education. Students who reach and exceed the state goal demonstrate a high level of performance, and students in Level 3 have demonstrated a fair set of skills and competencies, but not quite at the state goal level. Students who score in Level 2 have demonstrated limited skills, and those in the Intervention level (Level 1) have demonstrated very limited skills; students scoring in Level 1 or Level 2 need focused additional support and instruction to enable them to master these essential skills for success.

## II. What can be concluded about progress over time?

Direct comparisons from CAPT-1 to CAPT-2 are not appropriate due to changes in content, reporting and standards. Therefore, a research study was conducted to estimate how the students assessed in spring 2001 would have performed on certain tests if they had taken the CAPT-1 and applied CAPT-1 standards. Table 4 presents CAPT results for administration years 1995-2000. The 2001 results are an estimate of students' performance on selected sections of CAPT-1. Caution should be used in comparing the 2001 achievement data to previous years due to an increase in the number of special needs students who were tested.

**TABLE 4**  
**COMPARISON OF 1995-2001 CAPT RESULTS**  
 Results Based on First Generation Standards  
 "Bridge Study"

Year	Mathematics		Science		Interdisciplinary		Language Arts			
	% At Goal	Index	% At Goal	Index	% At Goal	Index	Response to Literature	Editing		Index
							% At Standard	% At Standard	% At Goal	
1995	38	65.7	32	67.6	38	68.5	32	78	31	64.7
1996	41	69.0	34	67.7	36	66.0	37	78	35	67.5
1997	42	70.4	35	66.9	38	68.7	36	80	35	66.9
1998	44	71.9	36	67.2	38	69.9	37	77	35	64.6
1999	43	72.0	38	68.3	42	71.3	40	80	39	68.8
2000	45	71.0	37	69.3	46	73.5	39	81	38	66.6
<b>2001</b>	<b>44</b>	<b>69.5</b>	<b>37</b>	<b>69.3</b>	<b>49</b>	<b>81.6</b>	<b>41</b>	<b>80</b>	<b>40</b>	<b>69.1</b>

While moving to the second generation CAPT limits comparisons from 2000 to 2001, the trend from 1995 to 2000 is one of continuous student growth for Connecticut’s high school students in acquiring skills in Mathematics, Science and Language Arts and on an Interdisciplinary task. **Further, a review of average scale scores from 1995 through 2000 (Table 5) shows that even greater progress has been made in Connecticut’s large urban school districts (ERG I) than across the state in general. This is encouraging data that demonstrates that where there is a will to change – high expectations and focused actions – progress can be made.**

**TABLE 5  
AVERAGE SCALE SCORES FOR ERG I AND FOR THE STATE IN 1995 AND 2000**

Test	Scale	State Goal	ERG I 1995	ERG I 2000	ERG I Improvement	State 1995	State 2000	State Improvement
Mathematics	100-400	266	206.0	221.4	+15.4	248.7	257.0	+8.3
Science	100-400	270	212.2	217.8	+5.6	249.6	251.8	+2.2
Editing	100-400	217	219.7	224.0	+4.3	250.0	249.9	-0.1
Response to Literature	20-120	83	64.3	68.3	+4.0	73.8	75.3	+1.5
Interdisciplinary	20-120	80	60.9	68.1	+7.2	70.9	76.6	+5.7

CAPT-2 begins a new cycle of assessment for which there is an expectation for continued growth in student achievement over time and a further reduction in the achievement gaps for students from poverty-level families, black and Hispanic students and students in our urban communities. As the second generation of CAPT moves forward, educators, local boards of education and parents must work together to ensure that all students can meet Connecticut’s high expectations.

### **III. What is the evidence of achievement gaps?**

**Closing the achievement gaps by racial/ethnic groups, gender, disability and poverty is Connecticut’s most important educational goal of this decade.** The Connecticut Association of Urban School Superintendents and the Connecticut Association of Boards of Education have joined with the Department in initiating new strategies to close these gaps. This is a significant challenge that will require the efforts of all who have a role in the education of Connecticut’s children.

Although there has been some small progress over the life of CAPT-1 (1995-2000) in reducing the achievement gap, an analysis of the data for the new generation of CAPT shows substantial gaps that cannot be tolerated. Table 6 shows CAPT-2 data for subgroups by gender, race/ethnicity, eligibility for free/reduced-lunch, participation in special education, and participation in bilingual education and English as a second language (ESL) programs.

Connecticut law in place for the 2001 administration allowed districts to exempt from CAPT any student enrolled in bilingual education or ESL for 30 months or less. Therefore, the data in Table 6 is based on a small number of students enrolled in bilingual education and ESL programs throughout the state who have received instruction in their program for more than 30 months but have not yet

mastered English at the independent level. For the 2002 administration of the CAPT, a larger number of students enrolled in bilingual education and ESL programs will participate in CAPT testing due to a change in the Connecticut General Statutes. The 2002 CAPT administration will require that students enrolled for more than 10 months in a bilingual or ESL program participate in CAPT.

**TABLE 6**  
**RESULTS BY GENDER, RACE, POVERTY, SPECIAL EDUCATION,**  
**BILINGUAL EDUCATION AND ENGLISH AS A SECOND LANGUAGE**  
**PERCENT AT/ABOVE GOAL/AVERAGE SCALE SCORE**

	<b>% At/Above Goal Mathematics</b>	<b>Average Mathematics Scale Score</b>	<b>% At/Above Goal Science</b>	<b>Average Science Scale Score</b>	<b>% At/Above Goal Reading Across the Disciplines</b>	<b>Average Reading Across the Disciplines Scale Score</b>	<b>% At/Above Goal Writing Across the Disciplines</b>	<b>Average Writing Across the Disciplines Scale Score</b>
Male	46	252	47	253.6	34	241.4	38	239.1
Female	43	249	40	247.3	50	259.5	59	261.2
Black	11	209	10	210.9	15	220.2	20	221.6
Hispanic	14	215.5	13	215.6	15	219.3	20	221.2
White	53	260.5	52	260.1	50	258.7	56	257.8
Asian	60	268.9	56	264.8	55	265.2	63	265.5
American Indian	35	237.4	37	240.9	25	233.6	27	228.7
Other Race	33	239.0	34	240.4	33	240.9	39	240
Free/Reduced Lunch	13	213.9	13	214.3	13	217.6	19	219.8
Full Price Lunch	50	256.3	48	256.2	47	255.8	53	255.2
Special Education	14	209.8	15	214.3	10	207.9	13	207.6
Not in Special Education	47	254.3	46	253.8	45	254.6	52	254.3
Bilingual Education	9	182.9	10	190	12	186.8	17	205.1
English as a Second Language	17	223.9	9	213.2	8	204.7	19	211.1
No ESL/Bilingual Program	45	250.7	44	250.5	42	250.8	49	250.5
<b>State Average</b>	<b>44.6</b>	<b>250.5</b>	<b>43.4</b>	<b>250.4</b>	<b>42.2</b>	<b>250.6</b>	<b>48.7</b>	<b>250.4</b>

Our baseline CAPT-2 data for subgroups of students shows that:

- While 10th grade boys outperformed girls in Mathematics and Science, the girls outperformed the boys in Reading Across the Disciplines and Writing Across the Disciplines by a much larger margin, which is consistent with performance on national tests such as SATs and ACTs.
- White and Asian students are substantially outperforming students who are Black, Hispanic and American Indian in all subject areas.
- Students from families below the poverty level are scoring far below their non-poverty counterparts on all parts of the CAPT-2.
- Students with disabilities who are able to take the standard grade-level CAPT-2 are scoring substantially lower than their nondisabled peers, but with additional support and attention to their learning needs, students with disabilities should demonstrate growth on these assessments.

Consideration of these data as well as the analysis by Educational Reference Group presented in Table 3 shows that our work to address the achievement gaps among Connecticut's students is just getting started. **Each local school district, school and classroom needs to examine its own data and evaluate it at the school and student levels to determine what works for which students and which students are still not being reached. These data should inform changes in curriculum and instruction that ensure progress toward the goal of improved achievement for all students.**

With the concerted effort of all who are responsible for the education of children in Connecticut, there should be a decrease in these achievement gaps across the second generation of CAPT to an even greater extent than in the previous generation.

#### **IV. CAPT Participation**

State and federal policy changed the assessment of special education students in 2000-2001. For the 2001 CAPT administration, school districts were asked to increase the number of students tested by including all special education students in either the standard CAPT or an alternate version. School districts were asked to follow the guideline of assessing approximately 80 percent of their special education students with the standard CAPT. The purpose of this new policy was to address issues of access and equity, raise expectations, and increase accountability for achievement. While many Connecticut school districts met or were within reach of the goal, some were not. There is also a difference in the identification rate of special education students across districts. **Therefore, it is not valid to compare test results (particularly percentage above goal) across districts with large discrepancies in their special education identification and participation rates.** Districts with a low identification rate of special education students (lower than the statewide average of 12 percent) may not reach the 80 percent guideline but may still be meeting overall participation expectations.

Total student participation in this year's CAPT assessment exceeds that in the year 2000 and represents a greater proportion of special education students taking the standard CAPT (62 percent).



Unfortunately, 18 percent of special education students were absent or had their test voided, and in ERG I, 21 percent of the special education students were absent or had their test voided.

Statewide, 89.4 percent of students participated in CAPT, including the out-of-level CAPT and the Skills Checklist, and those students who were exempt from the test (2.1 percent) due to participation for 30 months or less in a bilingual or ESL program. This leaves approximately 10.1% of **all** students and 21.3 percent of students in ERG I who were absent or with voided/nonscoreable tests. This absentee rate is obviously unacceptable and must improve.

The state goal for participation in CAPT should be at least 95 percent, which would require many communities to cut their absentee rate by at least 50 percent, and districts in ERG I would need to cut their absentee rate by 75 percent.

The language of Connecticut’s Education Statutes, Sec. 10-14n, specifies that “...each student enrolled in tenth grade in any public school...shall take a statewide mastery examination”, and the intent of Public Act 01-166 (see page 10) is clear that no student (in the graduating class of 2006 and thereafter) should be granted a Connecticut high school diploma without having attempted each test on the CAPT.

As part of the CAPT administration each year, districts are required to submit a CAPT document for all students in Grade 10, including those who are absent from testing. Additionally, districts must identify students enrolled in special education, bilingual education and ESL programs. This coding system was used to generate the numbers included in Table 7 . The participation percentages below are based on the average participation rates across all four tests.

**TABLE 7  
PARTICIPATION DATA**

	Number of Grade 10 Students	Participation Rate (Based on Standard Grade 10 Test, Out-of-Level Tests and Skills Checklist)	Percentage of Grade 10 Students Exempt from Testing (Bilingual/ESL Only)	Percentage with No Valid Score (nonscoreable, absent or void)	Percentage of Grade 10 Students Identified by the District as Enrolled in Special Education	Average Percentage of Special Education Students Participating in Standard CAPT
ERG A	2142	95.1	0.3	4.1	9.6	78.6
ERG B	5946	91.9	1.4	6.3	11.2	74.7
ERG C	3105	94.5	0.2	4.4	11.4	70.2
ERG D	5275	90.7	0.6	7.9	12.3	64.7
ERG E	1057	93.6	0	5	12.6	64.8
ERG F	5520	88.4	0.6	10.1	10.3	61.7
ERG G	1506	90	0.1	8.7	11.4	61.3
ERG H	6070	80.9	4.7	13.3	11.3	54.7
ERG I	5207	70.7	6.1	21.3	14.5	36.3
VO-TECH	2682	92.3	0.5	7.2	11.7	89.6
<b>STATE</b>	<b>38756</b>	<b>87.3</b>	<b>2.1</b>	<b>10.1</b>	<b>11.8</b>	<b>61.8</b>

**Student Participation: Conclusion**

Student assessment provides valuable information to parents, teachers, administrators and students, which can be used to ensure students are mastering the skills and competencies deemed important by Connecticut educators. It is, therefore, imperative that all 10<sup>th</sup> grade Connecticut students participate in the state assessments or make-up sessions. **High school leaders need to**

help their students appreciate the importance of acquiring skills and competencies and of demonstrating those to the best of their ability on the CAPT. A number of districts have offered incentives and rewards for students who participate in CAPT testing and reach certain levels of achievement. Examples of these incentives can be found on the state website ([www.state.ct.us/sde](http://www.state.ct.us/sde)) under Promising Practices.

## V. How will CAPT be used in graduation expectations?

When the Connecticut state legislature established the Connecticut Academic Performance Test (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.**

By September 1, 2002, each local board of education must specify the basic skills necessary for graduation beginning with the class of 2006 and include a process to access 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.

## VI. What was the performance of 11<sup>th</sup> and 12<sup>th</sup> graders in 2001?

Tables 8 and 9 summarize the performance of 11<sup>th</sup> and 12<sup>th</sup> grade students who voluntarily participated in retesting on the 2001 CAPT. Because the test these students took in 1999 and/or 2000 was a CAPT-1 test, it is not possible to produce cumulative results across years. These students will have labels and certificates for CAPT-1 and labels and certificates for CAPT-2, showing their separate performance on the two generations of the test. Table 8 shows that between 2,424 and 3,685 of Connecticut's 11<sup>th</sup> graders elected to retake a given portion of the CAPT-2 test and that the percentage of the 11<sup>th</sup> grade retesters who scored at or above the state goal ranged from 27 percent in Mathematics to 40 percent in Writing Across the Disciplines. Table 9 shows that between 97 and 175 of Connecticut's 12<sup>th</sup> graders elected to retake a given portion of the CAPT-2 test and that the percentage of the 12<sup>th</sup> grade retesters who scored at or above the state goal ranged from 9 percent in Science to 18 percent in Writing Across the Disciplines.

**TABLE 8  
2001 CAPT RESULTS FOR GRADE 11 STUDENTS**

Content Area	Scale (100-400)	State Goal	Number Tested	Percent of Students by Performance Level			
				Level 4 At/above Goal	Level 3	Level 2	Level 1 Intervention
Mathematics	100-400	261	3,176	27%	46%	15%	11%
Science	100-400	261	3,500	33%	48%	10%	8%
Reading Across the Disciplines	100-400	258	3,685	37%	41%	14%	7%
Writing Across the Disciplines	100-400	250	2,424	40%	39%	14%	7%

**TABLE 9**  
**2001 CAPT RESULTS FOR GRADE 12 STUDENTS**

Content Area	Scale (100-400)	State Goal	Number Tested	Percent of Students by Performance Level			
				Level 4 At/above Goal	Level 3	Level 2	Level 1 Intervention
Mathematics	100-400	261	157	10%	43%	26%	21%
Science	100-400	261	156	9%	46%	19%	26%
Reading Across the Disciplines	100-400	258	175	14%	43%	25%	18%
Writing Across the Disciplines	100-400	250	97	18%	43%	20%	20%

## **VII. How has the CAPT changed?**

The process by which each generation of the CAPT is developed is extensive, spanning a two or three-year period and going through many stages. The development process is coordinated by staff members in the Bureau of Student Assessment and Research at the Connecticut State Department of Education (CSDE), but it also involves many other people who represent a wide variety of perspectives and areas of expertise. CSDE curriculum specialists and Connecticut teachers who are content experts play a critical role and work closely with the assessment staff throughout the process.

It has been the Connecticut State Department of Education's policy to regularly review the major components of the statewide student assessment systems approximately every five to seven years. These review periods are used to step back and examine the direction of the assessment programs. These reviews also allow for changes that may have occurred in state curriculum frameworks, in legislation, and in priorities on the national, state and local levels.

The Second Generation of the CAPT was administered for the first time in the spring of 2001. In 1998, the Department began development of the Second Generation of the CAPT. The majority of the CAPT has remained the same from Generation 1 to Generation 2, providing a necessary continuity of focus. However, some adjustments were made based on the need for more specific information and the need for increased measurement accuracy and stability over time. Some of the changes include:

- In the Writing Across the Disciplines section, the combination of student scores on the two Interdisciplinary Writing tests and the Editing & Revising test will result in increased stability of scores as well as a more comprehensive picture of how well students write;
- In the Reading Across the Disciplines section, a new test was added, the Reading for Information test. This addition to the Response to Literature test provides a more comprehensive view of how well students read and also improves the stability of the Reading Across the Disciplines scores; and
- In both the Mathematics and Science tests, the number of test items has been increased, and a careful balance of items for each content strand within mathematics and science has been

ensured. These changes allow for more comparable results over time and for the reporting of subscores in each of the content strands.

The second generation of CAPT includes tests in the areas of Mathematics, Science, Reading Across the Disciplines and Writing Across the Disciplines. Each is described below.

Mathematics: The Mathematics test includes a combination of grid-in and open-ended items. The items are all directly mapped onto the state's mathematics content standards. The test measures how well students compute and estimate, solve problems and communicate their understandings.

Science: The Science test includes a combination of multiple-choice and open-ended items. The test assesses students' understanding of important scientific concepts, as well as their application of those concepts to realistic problems. In addition, experimentation and problem solving skills via scientific reasoning are a major focus of the test.

Reading Across the Disciplines: The Reading Across the Disciplines section contains two tests that assess students' reading skills: Response to Literature and Reading for Information. In the Response to Literature test, students are asked to read a short story and then respond in writing to four open-ended questions. Papers are scored as a first draft. Four dimensions are considered when evaluating the student's responses: initial understanding of the text; interpretation of the text; making connections between the text and other texts and/or experiences; and critical evaluation of the text. The score is based on how well the student understands the characters in the story, what they think the story means, how well they connect the story to outside experiences and how they challenge the author's meaning or quality of the text.

The Reading for Information test includes a combination of multiple-choice and open-ended items. The test requires students to read three nonfiction articles taken from magazines, newspapers and journals, the type of reading that students might be required to do across many different content areas. The test measures how well students interpret or explain each article and how well they evaluate the way the author wrote the article.

Writing Across the Disciplines: The Writing Across the Disciplines section has two tests that assess students' writing skills: (1) Interdisciplinary Writing and (2) Editing & Revising. The Interdisciplinary Writing section requires students to apply knowledge and skills they have gained through their school career to an important contemporary issue. This assessment consists of two Interdisciplinary Writing tests. For each of these tests, students read three short articles about an important issue, take a position on the issue and write a first draft of a persuasive letter. The tests measure how well students take a clear position on the issue and use accurate information from the articles to support their position. Students are assessed on how well they organize their ideas in a logical and effective manner so that their audience understands and follows their thinking and express their ideas clearly and fluently using their own words.

The Editing & Revising test consists of all multiple-choice questions. The Editing & Revising test focuses on editing, composing and revising skills. The test requires students to read four passages of sample student writing and answer 24 multiple-choice questions to correct common errors in organization, word choice, syntax, capitalization, punctuation, usage and spelling. Test items are scored electronically as either correct or incorrect.

Standards were established for CAPT-2 in each of the four major content areas: Reading Across the Disciplines, Writing Across the Disciplines, Mathematics and Science. The standard-setting process established a goal standard, which represents a high but reasonable level of achievement, as well as two other standards below the goal, resulting in a total of four achievement levels. In all content areas, the standards are based on scale scores which can range from 100-400. Students who reach the state goal in any of the four content areas receive a Certificate of Mastery. In the case of Reading Across the Disciplines and Writing Across the Disciplines, the standards are set on the combined score across the component tests.