



## 2002-03 End-of-Course Multiple-Choice Test Results

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### Background

Currently, North Carolina administers 11 End-of-Course (EOC) tests for high school students. The tests are aligned with the Standard Course of Study in each of the subjects tested, and include ten multiple-choice tests (Algebra I, Algebra II, Geometry, English I, U.S. History, Economic/Legal/Political Systems [ELP], Biology, Chemistry, Physical Science, and Physics) and one writing test (English II). (Note: The State Board of Education withdrew the English II test in 2002 in order to revise scoring procedures.)

In 1995-96, under the ABC's plan, EOC testing was required statewide for all students enrolled in Algebra I, English I, Biology, ELP, U.S. History, and English II, with testing in the remaining courses optional for local school districts. These six courses are graduation requirements, and tests in these courses were revised to place a stronger emphasis on higher-order thinking skills. Beginning in 1998-99, all students statewide enrolled in five elective courses (Geometry, Algebra II, Chemistry, Physics, and Physical Science) were also required to take EOC tests.

The multiple-choice tests must be given during the last two weeks of the course. Results of the tests are used for state accountability programs.

### Districtwide Results

End-of-Course (EOC) test scores in the Wake County Public School System (WCPSS) in 2002-03 showed generally positive results when compared to prior years. Average scale scores rose in six out of ten subject areas, and the percentage of students scoring in the proficient range (Level III or Level IV) reached new highs in five out of ten subjects.

Other highlights of 2002-03 EOC results include:

- The composite percentage of test scores at Level III or IV rose to its highest level in five years. Of the 54,516 EOC exams taken by WCPSS students, 81% of the tests had scores at Level III or IV, almost one percentage point higher than the previous year (80.1%).
- The largest gain in achievement occurred in English I, where the percentage of students at Level III or IV increased from 81.2% in 2001-02 to 88.9% in 2002-03. The largest drop was in Biology, where the percentage proficient declined from 80.6% to 74.3%.
- Test results disaggregated by race and ethnicity show that the achievement gap between student subgroups did not narrow in most subject areas, with the exception of English I, where black students made significant gains.

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## EOC Achievement Levels and Scale Scores

EOC multiple-choice tests have both achievement levels and scale scores. There are four broad achievement levels, or performance standards, with each representing a different level of competency in a subject area. The achievement levels were originally set by having a large sample of students categorized into the various levels by expert judges. The percentages of students in each achievement level were then used in conjunction with scores from the first administration of each test to determine where the cut points should be for the achievement levels. Scale scores are equated from year to year as new tests are developed, and school results are used for state accountability programs. Figure 1 shows the range of scale scores associated with each achievement level for each of the EOC tests. The North Carolina Department of Public Instruction (NCDPI) defines the four achievement levels as follows:

**Level I:** students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

**Level II:** students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course, and are minimally prepared to be successful at a more advanced level in the content area.

**Level III:** students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

**Level IV:** students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

**Figure 1**  
**EOC Achievement Levels by Scale Score Ranges**

	<b>Level I</b>	<b>Level II</b>	<b>Level III</b>	<b>Level IV</b>
<b>Algebra I</b>	23-44	45-54	55-65	66-87
<b>Algebra II</b>	23-45	46-57	58-68	69-88
<b>Geometry</b>	23-45	46-56	57-66	67-91
<b>English I</b>	22-42	43-51	52-60	61-85
<b>ELP</b>	21-42	43-51	52-60	61-90
<b>U.S. History</b>	25-47	48-56	57-64	65-90
<b>Biology</b>	23-46	47-54	55-64	65-88
<b>Chemistry</b>	23-47	48-55	56-64	65-88
<b>Physics</b>	23-42	43-51	52-62	63-87
<b>Physical Science</b>	23-43	44-53	54-63	64-87

**Note:** For further information about the development of achievement levels and scale scores, see *Understanding End-of-Course Testing: Achievement Levels*, Assessment Brief, Volume 5 No. 5. The Assessment Brief is published by the North Carolina Division of Accountability Services in the Department of Public Instruction and is available at the DPI website at [www.ncpublicschools.org](http://www.ncpublicschools.org).

### EOC Mean Scale Scores

When compared with 2001-02 test results, mean scale scores for WCPSS students in 2002-03 increased the most in English I (from 58.6 to 60.4), followed by U.S. History (from 58.9 to 60.0), and Chemistry (from 63.2 to 64.0).

Average scale scores showed declines in four subjects: Physics (from 63.8 to 62.7), Biology (from 60.6 to 59.6), Physical Science (from 56.0 to 55.2), and Algebra I (from 66.4 to 66.2).

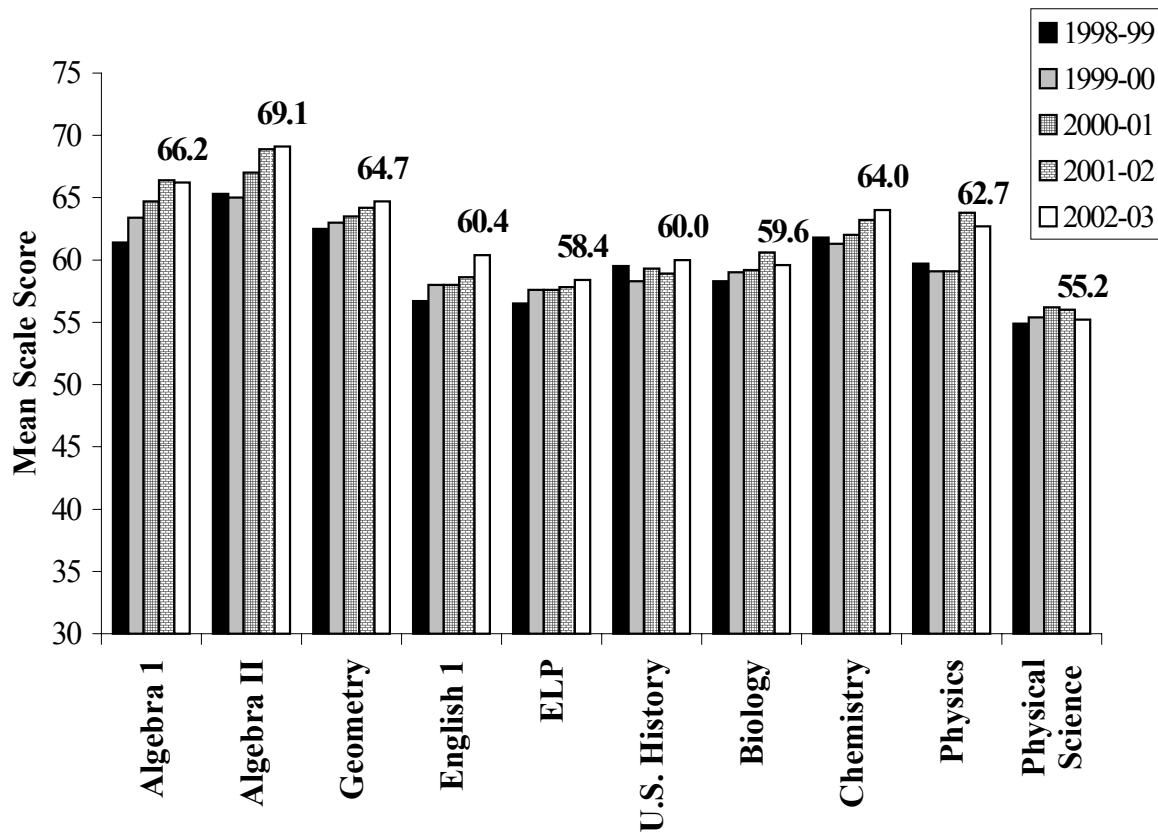
Mean scale scores surpassed the 60-point mark in seven out of ten subject areas, compared with six last year. The highest mean scale scores were in Algebra II (69.1) and Algebra I (66.2). The lowest were in Physical Science (55.2) and ELP (58.4).

**Figure 2**  
**EOC Mean Scale Scores For WCPSS Over 5 Years**

	<b>1998-99</b>	<b>1999-00</b>	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>
<b>Algebra I</b>	61.4	63.4	64.7	66.4	<b>66.2</b>
<b>Algebra II</b>	65.3	65.0	67.0	68.9	<b>69.1</b>
<b>Geometry</b>	62.5	63.0	63.5	64.2	<b>64.7</b>
<b>English I</b>	56.7	58.0	58.0	58.6	<b>60.4</b>
<b>ELP</b>	56.5	57.6	57.6	57.8	<b>58.4</b>
<b>U.S. History</b>	59.5	58.3	59.3	58.9	<b>60.0</b>
<b>Biology</b>	58.3	59.0	59.2	60.6	<b>59.6</b>
<b>Chemistry</b>	61.8	61.3	62.0	63.2	<b>64.0</b>
<b>Physics</b>	59.7	59.1	59.1	63.8	<b>62.7</b>
<b>Physical Science</b>	54.9	55.4	56.2	56.0	<b>55.2</b>

Figure 3 shows trends in each of the EOC exams over the past five years. Average scale scores have shown fairly steady improvement in Algebra II, Geometry, English I, and Chemistry. Mean scale scores in Algebra I and Biology had been improving for several years prior to declining in 2002-03. Scores in ELP and U.S. History were fairly stable in the four-year period prior to this year, when increases were shown in both subject areas. Physics saw a large gain in 2001-02 followed by a small drop in 2002-03. Physical Science mean scale scores have fallen for two consecutive years.

**Figure 3**  
**EOC Mean Scale Scores for WCPSS Over 5 Years**



### Percentage of Students At Level III or Level IV

As shown in figures 4 and 5, the percentage of students scoring at Levels III or IV on EOC exams reached new five-year highs in five of the ten tested courses in 2002-03. However, the percentage of students scoring in the proficient range declined from the previous year in four subject areas. The proficiency percentage stayed the same in Algebra I (88.3%).

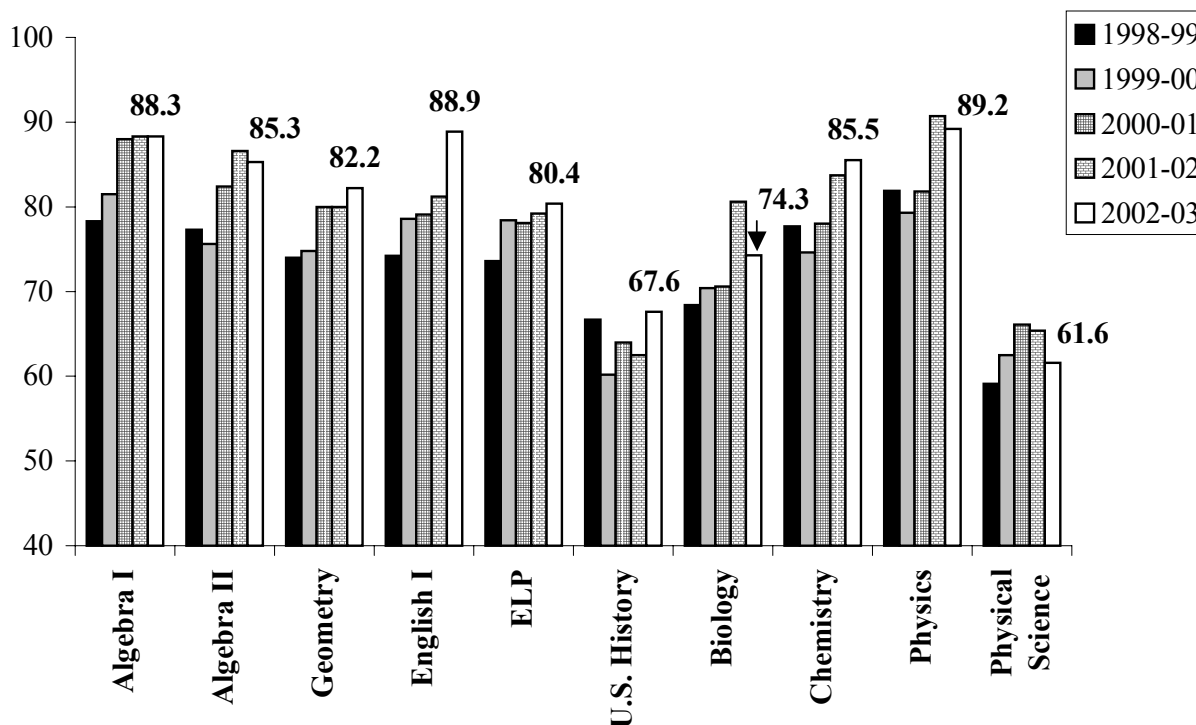
When compared to 2001-02 test results, the percentage of WCPSS students scoring at Level III or IV in 2002-03 increased the most in English I (from 81.2% to 88.9%) and U.S. History (from 62.5% to 67.6%). The largest declines were in Biology (from 80.6% to 74.3%) and Physical Science (from 65.4% to 61.6%).

The subject areas with the highest percentage of students achieving proficiency were Physics (89.2%), English I (88.9%), and Algebra I (88.3%). The lowest proficiency percentages were in Physical Science (61.6%) and U.S. History (67.6%), the only two subject areas with less than 70% of students demonstrating proficiency.

**Figure 4**  
**Percentage of Students Scoring At Level III or IV**  
**on EOC Exams Over 5 Years**

	1998-99	1999-00	2000-01	2001-02	2002-03
<b>Algebra I</b>	78.3	81.5	88.0	88.3	<b>88.3</b>
<b>Algebra II</b>	77.3	75.6	82.4	86.6	<b>85.3</b>
<b>Geometry</b>	74.0	74.8	80.0	80.0	<b>82.2</b>
<b>English I</b>	74.2	78.6	79.1	81.2	<b>88.9</b>
<b>ELP</b>	73.6	78.4	78.1	79.2	<b>80.4</b>
<b>U.S. History</b>	66.7	60.2	64.0	62.5	<b>67.6</b>
<b>Biology</b>	68.4	70.4	70.6	80.6	<b>74.3</b>
<b>Chemistry</b>	77.7	74.6	78.0	83.7	<b>85.5</b>
<b>Physics</b>	81.9	79.3	81.8	90.7	<b>89.2</b>
<b>Physical Science</b>	59.1	62.5	66.1	65.4	<b>61.6</b>

**Figure 5**  
**Percentage of Students Scoring At Level III or IV**  
**On EOC Exams Over 5 Years**



### Composite Performance Over Time

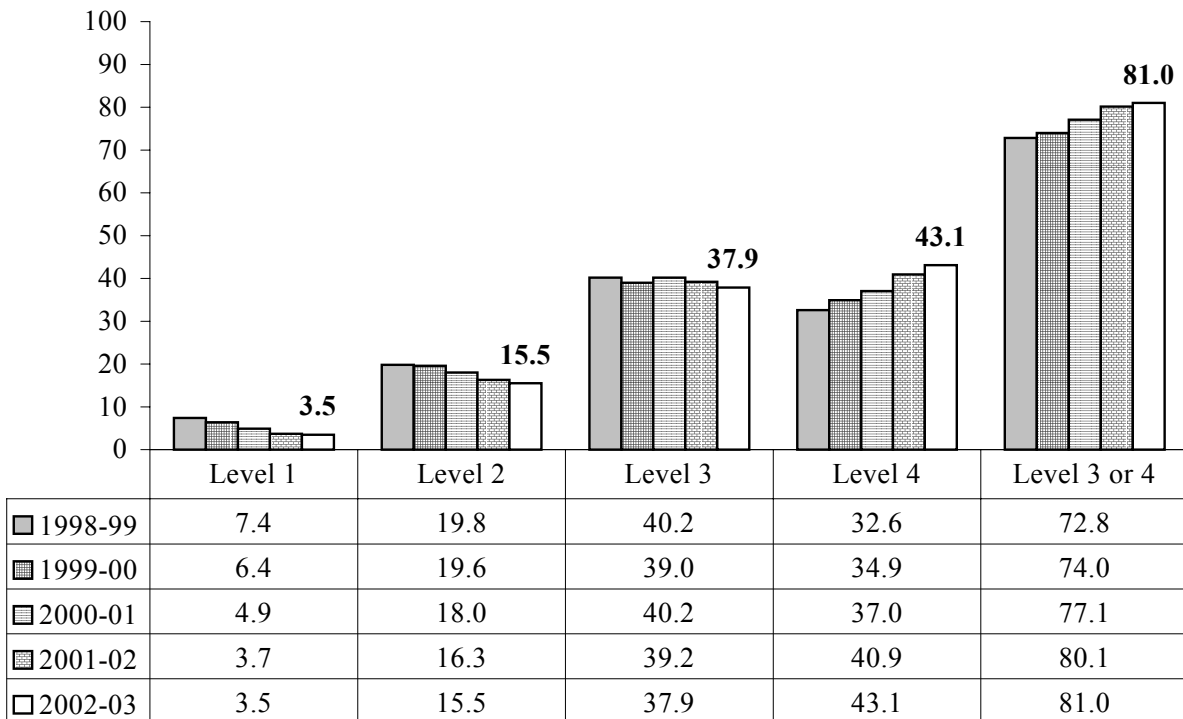
Figures 6 and 7 show the trend over the past five years in a composite measure of student achievement. The composite represents the percentage of all EOC tests (in all ten subject areas) with scores at Levels III or IV. In 2002-03, the composite percentage rose to its highest level in 5 years. Of the 54,516 EOC tests taken by WCPSS students, 81% of them had scores at Level III or IV, almost one percentage point higher than the previous year (80.1%). The overall percentage of test scores at Level III or IV has risen 8.2 percentage points since 1998-99, and now represents more than three-fourths of all scores. The percentage of scores at Level I and II has steadily declined over the five-year period, and the percentage at Level IV has systematically increased.

*\*Note: In the "2001-02 End-of-Course Test Results" report, the composite performance was inaccurately calculated as the average proficiency percentage for the 10 EOC exams. The measure utilized in the 2002-03 report has greater validity, and therefore, the percentages for prior years have been recalculated using this methodology.*

**Figure 6**  
**Number of EOC Tests and Percent Proficient over 5 Years**

	<b>Number of EOC Tests (All Subjects)</b>	<b>Percent of Scores At Level III or IV</b>
1998-99	49,299	72.8
1999-00	50,613	74.0
2000-01	51,418	77.1
2001-02	53,792	80.1
<b>2002-03</b>	<b>54,516</b>	<b>81.0</b>

**Figure 7**  
**Composite Percentage of All EOC Test Scores  
 by Achievement Level over Five Years**



### Disaggregated Results for 2002-03

Figure 8 shows the number of exams taken by WCPSS students in 2002-03 in each subject area. The exam totals are disaggregated by gender, race and ethnicity, students with disabilities (SWD), and limited English proficiency (LEP). Figures 14 and 15 show proficiency percentages and mean scale scores for these selected student sub-groups.

**Figure 8**  
**Number of EOC Exams Taken**  
**by Selected Student Sub-groups, 2002-03**

	<b>Algebra I</b>	<b>Algebra II</b>	<b>Geometry</b>	<b>English I</b>	<b>ELP</b>	<b>U.S. History</b>	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>	<b>Phys. Science</b>
<b>ALL</b>	8504	5286	6184	7689	6691	6398	6215	3792	1231	2526
<b>Male</b>	4197	2470	3041	3804	3298	3176	3075	1737	714	1342
<b>Female</b>	4307	2816	3143	3885	3393	3222	3140	2055	517	1184
<b>White</b>	5461	3850	4369	4803	4273	4311	4067	2928	975	1246
<b>Black</b>	2168	936	1246	2084	1695	1514	1570	519	105	1036
<b>Asian</b>	351	301	293	298	312	303	244	230	120	52
<b>Hisp/Latino</b>	361	114	179	370	287	183	236	66	14	140
<b>Multi-racial</b>	141	69	87	116	112	77	81	36	14	46
<b>Am. Indian</b>	22	16	10	18	12	10	17	13	3	6
<b>SWD</b>	929	265	411	1046	776	609	698	126	36	450
<b>Not SWD</b>	7575	5021	5773	6643	5915	5789	5517	3666	1195	2076
<b>LEP</b>	197	78	95	181	170	151	125	28	17	95
<b>Not LEP</b>	8307	5208	6089	7508	6521	6247	6090	3764	1214	2431

Note:

- SWD represents students participating in special education programs; Not SWD represents students who do not participate in special education programs.
- LEP represents students participating in Limited English Proficiency programs; Not LEP represents students who do not participate in LEP programs.



## **Gender Differences**

Male students performed better than female students in eight out of ten EOC tests: Geometry, ELP, U.S. History, Biology, Chemistry, Physics, and Physical Science. The largest differences occurred in U.S. History (71.9% of male students scored at Level III or IV compared to 63.4% of female students), and Physical Science (67% of male students at Level III or IV vs. 55.4% of female students). The only subject area in which female students outperformed male students was in English I, where 91.3% of female students scored at Level III or IV compared to 86.5% of male students. Test results in Algebra I and Algebra II showed little difference by gender.

## **Differences by Race and Ethnicity**

Large differences among racial and ethnic groups are evident in both mean scale scores and the percentage of students scoring at Level III or IV on EOC tests. White students and Asian students had the highest proficiency percentages and mean scale scores. More than 90% of White students scored at Level III or Level IV on four out of ten exams, with the highest percentage passing the English I exam (96%). Asian students achieved their highest proficiency percentage on the Algebra I exam (96%), and as a group, surpassed 90% on five out of 10 exams.

Black students had the lowest proficiency percentages and mean scale scores among all racial and ethnic groups on nine of the ten tested subjects (they performed better than Hispanic/Latino students on English I). The achievement gap between Black students and White students (in terms of the percentage of students at Level III or Level IV) ranged from a low of 19.1 percentage points in Algebra I to a high of 44.5 points in Biology.

For longitudinal data on EOC achievement levels disaggregated by race, see Figures 9 through 13.

## **Students with Disabilities**

The percentage of students with disabilities scoring at Level III or IV was highest in Physics (80.6%), and surpassed 70% in three other subject areas: Algebra I (73.5%), Algebra II (74.3%), and Chemistry (72.2). The lowest proficiency percentage was in U.S. History (43.5%), and was lower than 50% in two other subject areas: Biology (47%) and Physical Science (49.3).

The achievement gap between students with disabilities and all other students was widest on the English I exam (a 33.5 point difference in the percentage proficient), and more than 25 percentage points in Biology, ELP, and U.S. History. The gap was less than 15 percentage points in five subject areas: Algebra II, Geometry, Chemistry, Physics, and Physical Science.

## **Students with Limited English Proficiency**

The percentage of LEP students scoring at Level III or IV was highest on the Physics exam (94.1%) and Algebra I (81.2%) exams, although only 17 LEP students took the Physics exam compared to 197 who took the Algebra I exam. The lowest proficiency percentages were in U.S. History (27.2%), Biology (34.4%), and English I (39.2%).

The achievement gap between LEP students and all other students (as measured by the percentage at Level III or IV) was widest in English I (a 50.9 percentage point difference) and U.S. History (41.4 percentage points). The gap was less than 10 percentage points in Algebra I, Algebra II, and Physics.

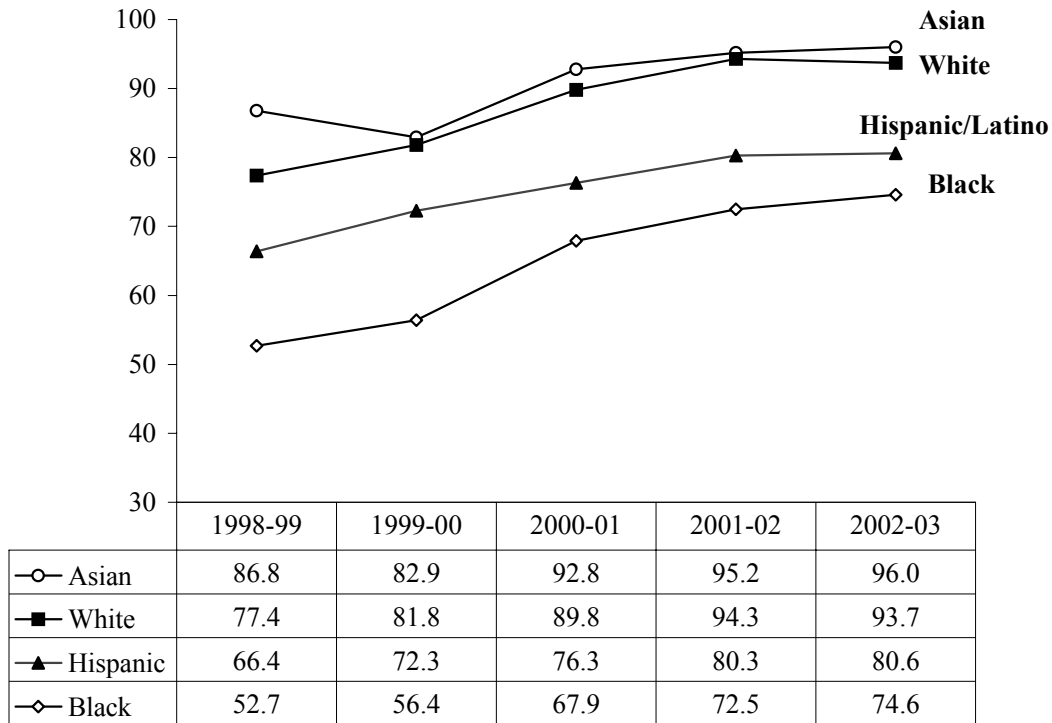
### **Achievement Levels on Five EOC Tests by Race and Ethnicity over Time**

Figures 9-13 show the percentage of students in each racial and ethnic group who scored at Level III or IV on the five EOC courses required for graduation for the five-year period 1998-99 through 2002-03. The following patterns can be seen:

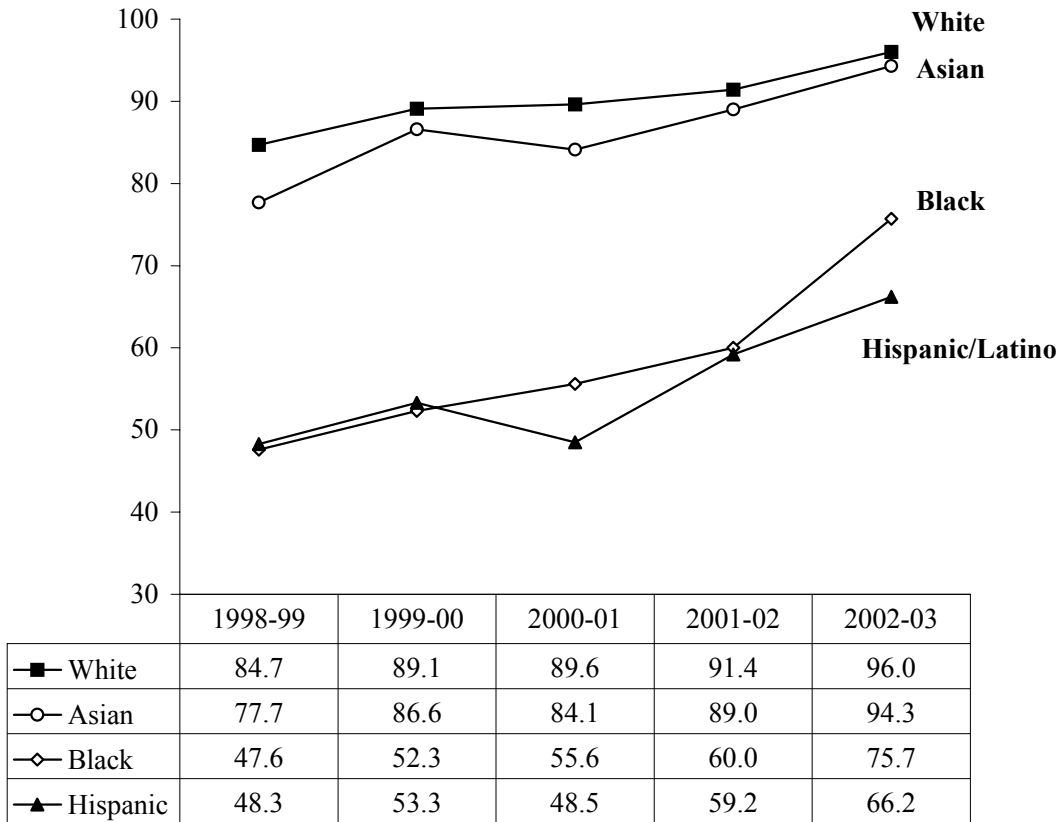
- The percentage of students scoring at Level III or IV increased for all racial groups in 2002-03 in English I and U.S. History. The percentage in the proficient range dropped in Biology for all groups. The percentage stayed relatively stable for all groups in Algebra I and ELP.
- Among all racial and ethnic groups, Black students had the lowest proficiency percentage in four out of the five subject areas in 2002-03; however, they had the highest cumulative growth in achievement over the past five years in English I (+28.1 percentage points) and in Algebra I (+21.9 points). As a result of these gains, the achievement gap in English I between Black students and White students narrowed from 37.1 percentage points in 1998-99 to 20.3 points in 2002-03. In Algebra I, the gap shrank from 34.1 to 21.4 percentage points over the five-year period. On the other hand, the achievement gap between the two groups persisted in ELP and U.S. History, and widened in Biology.
- **Algebra I** percentages show a steady pattern of improvement for all racial groups over the past five years. The overall growth in achievement was highest for Black students (a 21.9 percentage point increase from 1998-99 to 2002-03), followed by White students (+16.3), Hispanic/Latino students (+14.2), and Asian students (+9.2).
- **English I** percentages rose substantially for all racial and ethnic groups in 2002-03. With the exception of 2000-01 results, proficiency percentages have risen steadily for all groups over the past five years. The cumulative gain in the percentage of students scoring at Level III or IV since 1998-99 was largest for Black students (+28.1 percentage points), followed by Hispanic/Latino students (+17.9), Asian students (+16.6), and White students (+11.3).
- **ELP** gains have been smaller and less consistent for most racial groups. The percentage scoring at Level III or IV increased slightly in 2002-03 for White students and Hispanic/Latino students, but declined sharply for Asian students. Achievement growth since 1998-99 was less than 10 percentage points for all groups except Black students (+10.2).
- **U.S. History** proficiency percentages rose sharply for all groups except Hispanic/Latino students in 2002-03. However, over the past five years, performance on the exam has been erratic, and there has been no clear trend in test results. Black students and Hispanic students continue to do very poorly on the exam, with neither group surpassing 50% proficiency.

- Biology** proficiency percentages declined substantially for all four groups in 2002-03 after rising dramatically the previous year. Like the U.S. History exam, the achievement gap between White and Asian students on the one hand and Black and Hispanic/Latino students on the other has not narrowed over the past five years.

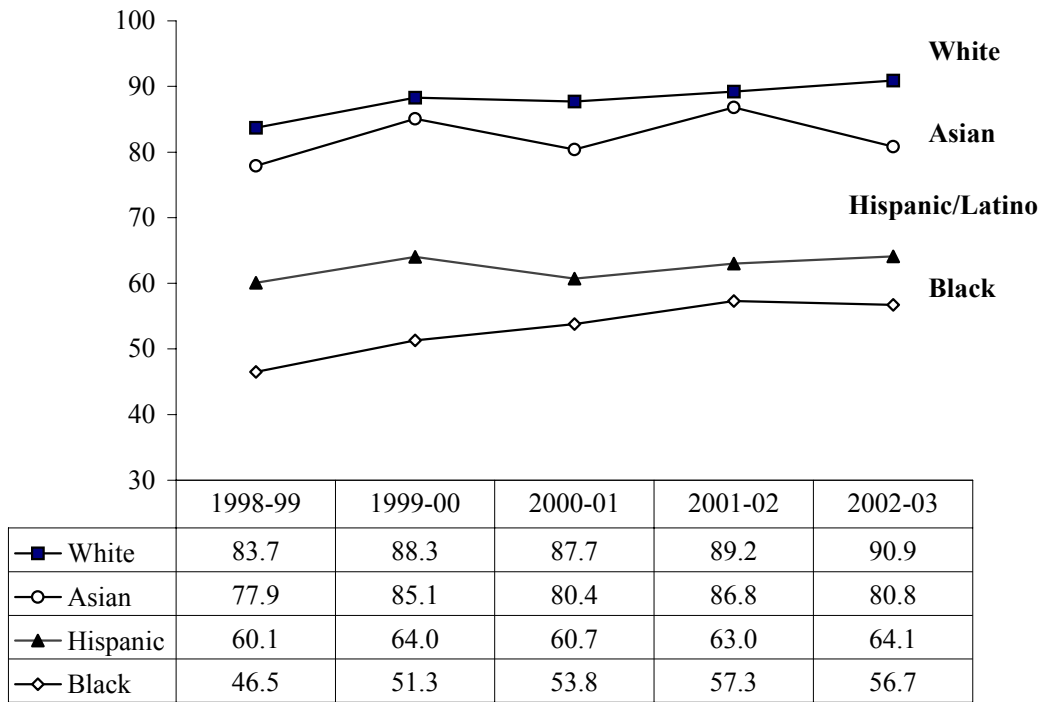
**Figure 9**  
**Percentage of Students At/Above Level III on Algebra I Exam**  
**by Race and Ethnicity Over Time**



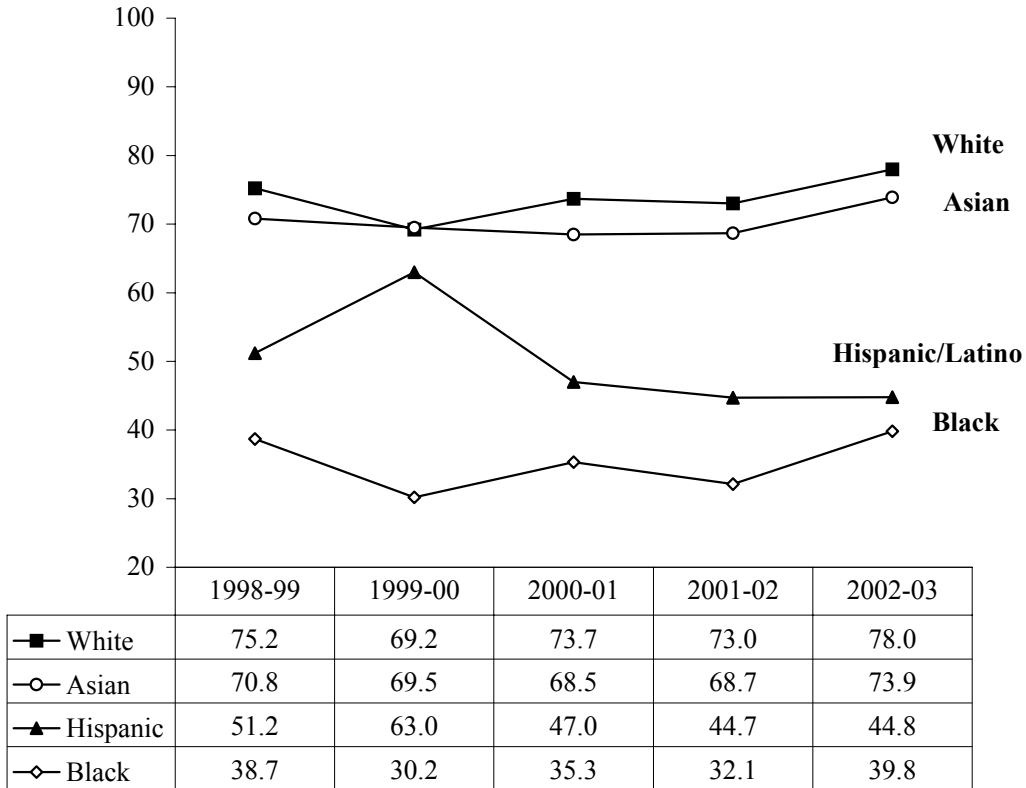
**Figure 10**  
**Percentage of Students At/Above Level III on English I Exam**  
**by Race and Ethnicity Over Time**



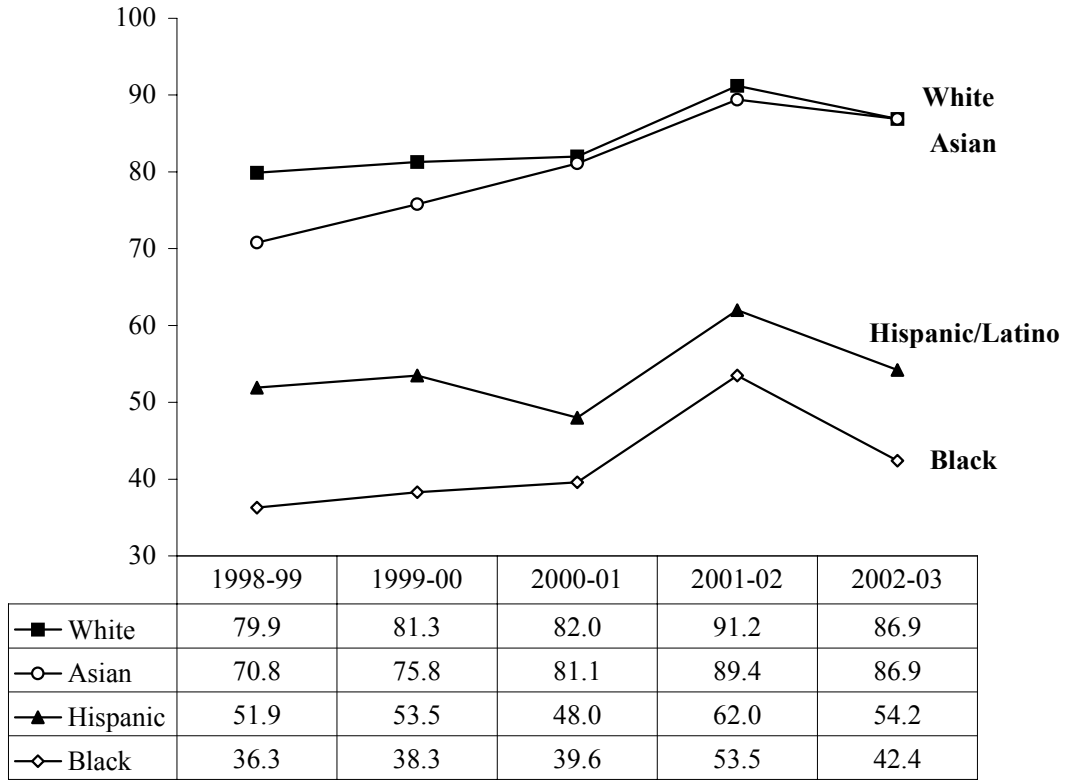
**Figure 11**  
**Percentage of Students At/Above Level III on ELP Exam**  
**by Race and Ethnicity Over Time**



**Figure 12**  
**Percentage of Students At/Above Level III on U.S. History Exam**  
**by Race and Ethnicity Over Time**



**Figure 13**  
**Percentage of Students At/Above Level III on Biology Exam**  
**by Race and Ethnicity Over Time**



**Figure 14**  
**Percentage of Students at Level III or IV For Selected Sub-Groups, 2002-03**

	<b>Algebra I</b>	<b>Algebra II</b>	<b>Geometry</b>	<b>English 1</b>	<b>ELP</b>	<b>U.S. History</b>	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>	<b>Physical Science</b>
<b>All Students</b>	88.3	85.3	82.2	88.9	80.4	67.6	74.3	85.5	89.2	61.6
<b>Male</b>	88.1	84.7	84.1	86.5	82.5	71.9	76.1	86.4	90.8	67.0
<b>Female</b>	88.6	85.8	80.4	91.3	78.4	63.4	72.5	84.7	87	55.4
<b>White</b>	93.7	89.5	89.7	96.0	90.9	78.0	86.9	87.8	91.3	77.0
<b>Black</b>	74.6	66.5	56.0	75.7	56.7	39.8	42.4	70.7	67.6	43.5
<b>Asian</b>	96.0	91.0	90.8	94.3	80.8	73.9	86.9	89.6	93.3	71.2
<b>Hispanic/Latino</b>	80.6	84.2	70.4	66.2	64.1	44.8	54.2	83.3	71.4	50.7
<b>Multiracial</b>	90.1	84.1	74.7	91.4	79.5	61.0	80.2	88.9	85.7	71.7
<b>Am. Indian</b>	86.4	93.8	70.0	94.4	83.3	80.0	64.7	92.3	100.0	50.0
<b>SWD</b>	73.5	74.3	68.9	60.0	54.0	43.5	47.0	72.2	80.6	49.3
<b>Not SWD</b>	90.1	85.9	83.1	93.5	83.9	70.2	77.7	86	89.5	64.2
<b>LEP</b>	81.2	79.5	70.5	39.2	48.2	27.2	34.4	75.0	94.1	49.5
<b>Not LEP</b>	88.5	85.4	82.4	90.1	81.3	68.6	75.1	85.6	89.1	62.0

Notes: See page 20.



**Figure 15**  
**EOC Mean Scale Scores For Selected Student Sub-Groups, 2002-03**

	<b>Algebra 1</b>	<b>Algebra II</b>	<b>Geometry</b>	<b>English 1</b>	<b>ELP</b>	<b>U.S. History</b>	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>	<b>Physical Science</b>
<b>All Students</b>	66.2	69.1	64.7	60.4	58.4	60	59.6	64	62.7	55.2
<b>Male</b>	66.5	69.4	65.1	59.5	59	60.9	59.9	64.6	63.9	55.9
<b>Female</b>	64.9	68.9	64.3	61.2	57.8	59.1	59.3	63.6	61.1	54.3
<b>White</b>	67.2	70.6	66.5	62.8	61	62	62	64.6	63.4	57.7
<b>Black</b>	59.8	61.9	57.9	55.6	52.4	54.5	53.4	59.4	55	52.2
<b>Asian</b>	71.9	74.1	69.7	62.5	60	62	63.2	67.7	64.4	57.6
<b>Hispanic/Latino</b>	61.7	66.7	60.8	54.4	54.3	55	55.3	62.1	58.1	53.4
<b>Multiracial</b>	66.2	67.5	62.3	59.8	57.8	58.4	59.4	65.2	63.8	56.6
<b>Am. Indian</b>	63.5	68.6	60.3	61	58.3	63.6	58.9	61.4	61.3	51.2
<b>SWD</b>	60.3	63.8	60.4	53.2	52.3	54.6	53.9	60.4	60.1	52.6
<b>Not SWD</b>	65.8	69.4	65	61.5	59.2	60.6	60.3	64.2	62.8	55.7
<b>LEP</b>	61.5	65.4	62.3	48.7	51.1	52.3	52.2	63.6	61.8	53.2
<b>Not LEP</b>	66.3	69.2	64.8	60.7	58.6	60.2	59.7	64	62.7	55.2

Notes: See page 20.

**Figure 16**  
**EOC Mean Scale Scores for Selected Student Sub-Groups, 2001-2002**

	<b>Algebra 1</b>	<b>Algebra 2</b>	<b>Geometry</b>	<b>English 1</b>	<b>ELP</b>	<b>US History</b>	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>	<b>Physical Science</b>
<b>All Students</b>	66.4	69.0	64.2	58.7	57.9	58.9	60.6	63.2	63.8	56.0
<b>Male</b>	66.5	69.5	64.8	57.7	58.4	59.7	60.9	64.2	64.8	56.6
<b>Female</b>	66.2	68.5	63.7	60.0	57.5	58.1	60.4	62.4	62.5	55.3
<b>White</b>	68.8	70.1	65.9	61.1	60.2	60.9	62.8	63.9	64.5	58.3
<b>Black</b>	59.6	62.6	57.2	53.4	52.6	52.9	54.7	58.6	56.5	52.8
<b>Asian</b>	71.7	73.6	68.8	61.7	60.3	60.8	63.8	66.2	64.2	56.3
<b>Hispanic/Latino</b>	62.4	65.6	62.1	53.3	53.9	55.6	56.2	60.2	61.0	55.1
<b>Am. Indian</b>	70.5	67.3	62.1	56.5	57.5	56.0	60.8	59.5	64.7	41.0
<b>Multiracial</b>	65.5	66.8	64.3	58.8	56.9	57.1	60.3	62.6	63.1	54.7
<b>SWD</b>	61.0	64.1	60.7	51.3	52.8	53.5	55.3	61.2	60.0	53.2
<b>Not SWD</b>	64.0	66.0	61.4	57.5	56.5	57.2	59.1	60.5	60.4	56.0
<b>LEP</b>	61.5	68.5	62.1	48.6	51.6	52.4	53.3	61.8	58.8	53.5
<b>Not LEP</b>	66.5	69.0	64.2	58.8	58.1	59.0	60.7	63.3	63.8	56.1

Notes: See page 20.

**Figure 17**  
**EOC Mean Scale Scores for Selected Student Sub-Groups, 2000-2001**

	<b>Algebra 1</b>	<b>Algebra 2</b>	<b>Geometry</b>	<b>English 1</b>	<b>ELP</b>	<b>US History</b>	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>	<b>Physical Science</b>
<b>All Students</b>	61.7	67.0	63.5	58.0	57.6	59.2	59.2	62.0	59.1	56.2
<b>Male</b>	62.1	67.8	63.9	57.4	58.1	60.1	59.5	62.7	60.3	57.1
<b>Female</b>	61.4	66.2	63.0	58.7	57.0	58.4	58.8	61.4	57.6	55.3
<b>White</b>	63.7	68.2	65.0	60.5	59.9	61.2	61.6	62.9	59.9	58.8
<b>Black</b>	57.3	59.9	56.8	52.3	51.7	53.5	52.7	56.4	51.9	51.8
<b>Asian</b>	63.6	72.3	65.8	60.4	58.4	60.3	61.2	65.1	61.6	58.7
<b>Hispanic/ Latino</b>	59.5	64.6	58.8	51.5	53.1	55.5	53.9	58.9	57.7	50.7

Notes: See page 20.

**Figure 18**  
**EOC Mean Scale Scores for Selected Student Sub-Groups, 1999-2000**

	<b>Algebra 1</b>	<b>Algebra 2</b>	<b>Geometry</b>	<b>English 1</b>	<b>ELP</b>	<b>US History</b>	<b>Biology</b>	<b>Chemistry</b>	<b>Physics</b>	<b>Physical Science</b>
<b>All Students</b>	60.1	65.0	62.6	58.0	57.7	58.3	59.0	61.3	59.1	55.4
<b>Male</b>	59.9	65.6	63.3	57.1	58.3	59.0	59.1	62.1	60.3	56.3
<b>Female</b>	60.3	64.5	62.0	59.0	57.0	57.7	58.8	60.6	57.5	54.3
<b>White</b>	61.9	66.4	64.2	60.4	59.8	60.1	61.2	62.1	59.8	58.3
<b>Black</b>	55.4	57.7	55.3	51.7	51.3	52.7	52.1	55.8	51.8	50.6
<b>Asian</b>	63.3	71.2	66.2	61.4	59.8	60.2	61.8	64.8	59.3	55.5
<b>Hispanic/ Latino</b>	58.2	63.1	61.1	53.3	54.1	57.4	53.5	60.6	57.5	52.0

**Notes**

- Figures 14-18 show disaggregated scores for high school students. However, Algebra I and Geometry scores include results for middle school students.
- LEP shows average scores for students with Limited English Proficiency; Not LEP shows mean scale scores for students who do not participate in LEP programs.
- SWD shows average scores for all students with disabilities; Not SWD shows mean scale scores for students who do not participate in special education programs.
- Disaggregated data prior to 2001-02 is limited to race and ethnicity, so Figures 17 and 18 do not include figures for SWD and LEP subgroups.

**Attachment A: End-of-Course Mean Scale Scores for Five Required Courses  
2001-2003**

School	English I			Algebra I			Biology			ELP			US History		
	00-01	01-02	02-03	00-01	01-02	02-03	00-01	01-02	02-03	00-01	01-02	02-03	00-01	01-02	02-03
Apex High	58.4	59.7	62.6	63.9	65.4	65.8	58.5	60.0	59.7	58.2	58.7	59.3	60.9	59.4	61.1
Athens Drive High	56.9	58.3	59.7	62.0	63.6	65.1	60.2	62.1	61.6	57.4	58.4	58.0	58.9	59.2	60.3
Broughton High	58.7	59.7	61.6	58.2	59.8	57.9	58.3	59.1	62.0	57.6	58.4	59.3	58.4	58.6	60.5
Cary High	58.4	59.5	61.6	64.2	65.8	66.9	59.2	63.4	62.6	58.1	58.4	59.6	60.2	59.4	59.3
East Wake High	55.4	56.0	57.4	61.9	65.6	63.8	56.8	56.8	55.8	57.5	57.3	55.0	55.8	56.5	56.4
Enloe High	59.8	60.7	63.1	57.4	56.2	56.9	61.5	61.2	59.9	58.4	59.3	59.6	62.1	60.4	61.1
Fuquay-Varina High	57.2	56.8	59.6	62.2	66.0	65.7	57.0	61.1	58.5	57.1	57.2	58.1	57.1	58.2	59.7
Garner High	54.6	54.9	55.7	59.5	59.7	58.1	57.4	59.2	58.0	52.7	52.9	54.3	57.8	56.9	58.6
Green Hope High	60.8	61.0	63.2	66.3	65.7	67.0	60.8	63.0	62.1	58.7	59.3	59.8	61.8	61.9	62.1
Leesville Road High	59.4	59.9	61.9	64.7	66.8	67.9	62.5	63.1	61.5	59.8	59.7	59.9	61.8	60.6	62.3
Mary E. Phillips High	52.1	49.4	52.2	54.2	55.4	53.2	51.3	51.6	50.5	52.6	54.7	50.6	48.6	48.2	49.3
Middle Creek High			59.5			62.0			61.3			50.6			55.3
Millbrook High	56.6	57.6	58.7	59.0	60.2	61.4	60.3	61.3	59.4	55.5	55.9	56.2	58.3	59.2	58.7
Sanderson High	58.5	58.1	59.3	60.2	63.8	63.4	59.0	59.2	58.2	57.7	56.9	56.5	59.8	58.2	60.5
Southeast Raleigh High	58.2	58.4	60.1	61.8	62.0	62.7	56.8	58.7	57.4	58.3	59.2	57.8	58.2	57.8	58.9
Wake Forest-Rolesville Hi	58.2	59.3	60.0	62.1	64.5	62.4	56.8	61.5	59.4	57.9	58.2	55.5	59.3	58.8	59.4
Wakefield High	60.1	59.7	60.9	63.1	64.8	65.6	60.9	63.0	60.4	60.2	62.1	61.0	59.6	59.2	62.2
WCPSS	58.0	58.7	60.4	64.7	66.4	66.2	59.2	60.6	59.6	57.6	57.9	58.4	59.2	58.9	60.0

**Attachment B: End-of-Course Mean Scale Scores for Five Elective Courses  
2001-2003**

School	Algebra 2			Chemistry			Geometry			Physical Science			Physics		
	00-01	01-02	02-03	00-01	01-02	02-03	00-01	01-02	02-03	00-01	01-02	02-03	00-01	01-02	02-03
Apex High	69.8	72.1	71.5	62.3	64.2	61.6	66.1	67.1	67.0	59.8	56.3	57.7	60.3	65.1	64.0
Athens Drive High	68.1	70.1	68.0	64.6	63.5	64.7	63.5	64.2	64.3	53.5	52.9	58.1	60.2	64.3	60.7
Broughton High	63.5	65.7	64.5	59.8	60.0	63.9	64.4	64.1	65.0	54.5	55.1	56.3	58.2	62.4	64.3
Cary High	68.3	71.1	72.4	62.1	63.4	65.1	65.7	67.8	65.9	57.5	54.7	57.9	56.7	61.4	60.9
East Wake High	60.9	64.0	64.6	55.4	60.2	57.8	62.6	62.0	63.0	51.6	54.8	53.2	51.6	56.5	56.1
Enloe High	66.2	68.7	68.7	62.3	65.1	64.6	61.9	62.3	62.9	51.2	49.6	50.1	60.2	65.2	65.2
Fuquay-Varina High	63.5	68.2	67.6	60.2	60.6	60.8	61.0	61.9	65.0	54.0	56.1	57.1	55.9	61.6	57.3
Garner High	63.8	65.9	65.0	60.7	62.1	62.8	59.7	60.1	59.5	51.1	53.4	53.1	54.5	56.8	58.8
Green Hope High	71.2	72.3	73.6	63.8	64.7	63.9	67.1	67.0	67.8	57.4	58.3	57.2	59.1	66.0	67.9
Leesville Road High	70.2	71.7	73.3	64.3	64.7	68.1	64.7	65.1	66.8	58.6	58.3	58.0	61.4	66.9	62.1
Mary E. Phillips High	54.2	56.0	57.2				58.5	57.1	52.4	51.3	50.5	50.6	46.5		
Middle Creek High			75.1			70.4			65.7			55.0			
Millbrook High	68.0	67.7	68.4	64.6	64.0	67.3	61.8	62.3	61.1	55.6	56.9	56.3	58.4	64.9	64.2
Sanderson High	69.1	68.2	66.6	64.5	65.0	66.0	63.8	63.2	64.1	56.8	55.7	53.4	60.6	63.7	67.0
Southeast Raleigh High	66.6	68.2	68.1	61.0	62.2	64.5	59.6	61.3	62.9	56.8	54.7	54.0	60.0	63.4	59.0
Wake Forest-Rolesville Hi	62.9	66.9	70.2	58.4	61.7	63.6	61.4	63.9	64.7	53.2	56.2	53.4	57.8	56.7	58.1
Wakefield High	71.8	70.9	71.7	60.0	64.5	62.8	66.5	64.2	64.7	59.7	59.0	53.7	59.6	65.7	62.1
WCPSS	67.0	69.0	69.1	62.0	63.2	64.0	63.7	64.2	64.7	56.2	56.0	55.2	59.1	63.8	62.7