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# END-OF-COURSE (EOC) MULTIPLE-CHOICE TEST RESULTS, 2009-10

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#### **ABSTRACT**

End-of-Course (EOC) tests are given statewide in selected courses typically taken in high school. Results for 2009-10 (and prior years, where available) are reported in terms of both average scale scores and the percentage of students scoring proficient. For the first time in 2009-10, all students who scored at Level II on EOCs were retested. Retests added 3.7 to 5.8 percentage points to the overall proficiency rates on each test. Changes in performance between 2008-09 and 2009-10 varied by group and by course, although most ethnic groups saw increases in both proficiency and average scale scores across the board. Despite gains of the last three to five years, Hispanic/Latino students, students from lower-income backgrounds, and students with limited English proficiency (LEP) scored below their corresponding NC state rates. The LEP subgroup is barely above 50% proficient. It is imperative that progress for these groups continue to accelerate.

#### **BACKGROUND**

In 2009-10, the North Carolina Department of Public Instruction (NCDPI) required that all public schools administer End-of-Course (EOC) tests to students enrolled in eight courses usually taken in high school. EOC tests were typically given during the last two weeks of the course. Results were then used for state accountability programs and to help determine whether students met the state's high school exit standards, which required students to pass five specific EOC tests in order to graduate from high school<sup>1</sup>.

EOC tests use a multiple-choice format and are aligned with the NC Standard Course of Study in each of the subjects tested—Algebra I, Algebra II, Biology, Civics & Economics, English I, Geometry, Physical Science, and U.S. History. In addition to being differentiated by subject area, EOC tests are also sometimes categorized as either "core" or "elective." The five core EOCs—Algebra I, English I, Biology, Civics & Economics, and U.S. History—were taken by the vast majority of high school students. The remaining three EOCs—Algebra II, Geometry, and Physical Science—can be thought of as elective EOCs because those courses were not part

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<sup>&</sup>lt;sup>1</sup> See http://www.ncpublicschools.org/docs/accountability/policyoperations/exitstandards/exitstandardsguidehs.pdf for more information.

of the graduation requirements for all students (Table 1). Therefore, the performance of students on the elective EOC tests is not always representative of the entire high school population.

Table 1 WCPSS 2009-10 EOC Tests

	# of
Courses	Tests
Core	
Algebra I	10,463
Biology	10,033
Civics & Economics	10,392
English I	10,736
U.S. History	9,289
Elective	
Algebra II	8,598
Geometry	7,981
Physical Science	3,535

Data Source: http://accrpt.ncpublicschools.org/app/2010/disag/

Since 2005-06, the option of retesting has been available to students scoring below proficiency. This retesting gave individual students a second opportunity to demonstrate mastery. While these EOC retest scores had previously been important for decision making about individual students, they had not been used in the past for the public reporting of testing results. That is to say, a high school's publicly-reported testing and accountability results (under the ABCs and AYP) were based solely on the first administration of the test for each student. Whether a student did better on a retest may have had implications for the individual student, but had no effect on the school's official results.

For the first time in 2009-10, the North Carolina Department of Public Instruction (NCDPI) chose to include EOC retest results into each school's official accountability measures. Specifically, if a student did not pass the test on the first administration and was subsequently retested, the higher of the two scores became the official score of record for the school's publicly-reported proficiency rates under the ABCs and AYP. For that reason, statewide EOC results in 2009-10 appeared to improve due in part to this change in policy.

In this report, Wake County Public School System (WCPSS) EOC results for the 2009-10 school year will be reported both *with and without* the inclusion of retest results. Although NCDPI did not report results based only on initial tests in 2009-10, this additional information will allow for more direct comparison of 2009-10 results in WCPSS with results from previous years.

Student performance on EOC multiple-choice tests is measured by both a scale score and achievement level. There are four achievement levels, each representing a different level of competency in a subject area (Table 2). Table 3 shows the range of scale scores associated with each achievement level for each of the eight EOC tests administered in 2009-10. In this report, EOC results will be presented using two types of measurements: the percentage of students scoring at or above Achievement Level III (i.e., proficiency rates) and average scale scores.

Note that test results for a relatively small number of WCPSS students who take alternate versions of EOC tests (i.e., NCEXTEND2) are not included here, as the scores resulting from those assessments are not directly comparable to those from the regular multiple-choice EOC tests. These students are typically students with disabilities (SWD) whose level of impairment is such that they cannot demonstrate their learning accurately on the regular multiple-choice test even with various accommodations and/or modifications. Their results are reported in a separate document.

Table 2
Achievement Levels for the North Carolina Testing Program

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 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 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 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.

Note: Official descriptions vary by course, and are listed in NC State Board of Education Policy GCS-C-010 (see http://sbepolicy.dpi.state.nc.us/ for more details).

Table 3
EOC Achievement Levels by Scale Score Ranges, 2009-10

Description	Level I	Level II	Level III	Level IV
Algebra I	Less than or equal to 139	140-147	148-157	Greater than or equal to 158
Algebra II	Less than or equal to 138	139-146	147-157	Greater than or equal to 158
Biology	Less than or equal to 137	138-146	147-158	Greater than or equal to 159
Civics & Economics	Less than or equal to 140	141-147	148-159	Greater than or equal to 160
English I	Less than or equal to 137	138-145	146-156	Greater than or equal to 157
Geometry	Less than or equal to 138	139-147	148-157	Greater than or equal to 158
Physical Science	Less than or equal to 139	140-148	149-159	Greater than or equal to 160
U.S. History	Less than or equal to 139	140-148	149-159	Greater than or equal to 160

#### OVERALL DISTRICT RESULTS

Between 2005-06 and 2007-08, all eight EOC tests were revamped due to changes in the curriculum. Therefore, the ability to compare results over time on any of those tests is somewhat compromised. The results presented below will use whatever results are available for the current edition of those tests.

As shown in Figures 1 and 2 along with Tables 4 and 5, average WCPSS EOC scale scores on the initial tests rose for the third consecutive year in 2009-10 in all eight subjects. These increases of 0.1 scale score point in English I to 1.8 scale score points in Physical Science show "real" improvement in all courses since the comparisons are based on the same measures. Scale scores prior to 2006-07 are not shown for mathematics and English I EOCs and prior to 2007-08 for science EOCs, as the scales on which those tests are measured changed when new tests were introduced, rendering average scale scores non-comparable to previous years. On initial tests, substantial gains in scale score averages also occurred in U.S. History (1.3 scale score points) and Algebra I (0.9).

Figures 1 and 2 along with Tables 4 and 5 also show the average scale scores after retests were included. The average improvement due to retesting ranged from 0.3 scale score points in Civics & Economics to 0.6 scale score points in Physical Science.

Although the scale scores reported for each EOC test are in the 100s range for each course, average scale scores cannot be compared across courses (e.g., comparing Algebra I to Geometry, etc.), because the underlying scales are not identical (Table 3). Therefore the only valid comparisons are the year-to-year changes for an individual test.

170 165 160 155 150 145 140 135 130 09-10 07-08 20-90 08-09 09-10 05-06 20-90 20-90 20-90 Algebra I Biology **Civics & Economics** English I **U.S. History** ■ Initial Test

Figure 1 WCPSS Core EOC Scale Scores, 2005-06 to 2009-10

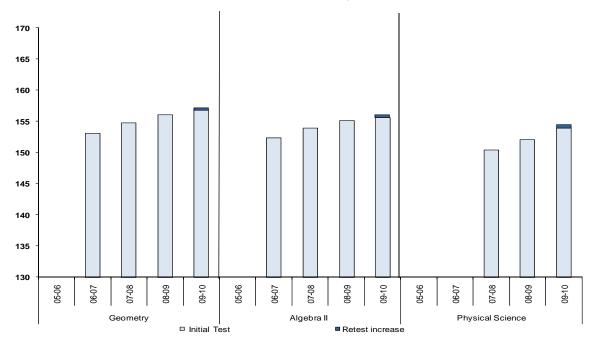
Note: Scale scores are not shown where the scales changed when new tests were introduced.

Table 4
WCPSS Core EOC Scale Scores, 2005-06 to 2009-10

	05-06	06-07	07-08	08-09	09-10				
Core Courses		Initia	l Test		Initial Test	Retest Increase	With Retests		
Algebra I	*	155.5	155.7	155.9	156.8	0.5	157.3		
Biology	*	*	153.8	155.2	155.4	0.4	155.8		
Civics/									
Economics	154.3	154.1	155.1	155.9	156.1	0.3	156.4		
English I	*	152.8	153.3	153.7	153.8	0.4	154.2		
U.S.History	154.4	154.3	154.7	155.5	156.8	0.4	157.2		

<sup>\*</sup>Scale scores are not shown where the scales changed when new tests were introduced.

Figure 2 WCPSS Elective EOC Scale Scores, 2005-06 to 2009-10



Note: Scale scores are not shown where the scales changed when new tests were introduced.

Table 5 WCPSS Elective EOC Scale Scores, 2005-06 to 2009-10

	05-06	06-07	07-08	08-09			
Elective Courses		Initia	l Test	Initial Test	Retest Increase	With Retests	
Geometry	*	153.1	154.8	156.1	156.8	0.4	157.2
Algebra II	*	152.4	154.0	155.2	155.6	0.5	156.1
Physical Science	*	*	150.4	152.1	153.9	0.6	154.5

<sup>\*</sup>Scale scores are not shown where the scales changed when new tests were introduced.

While average scale scores provide a more precise measurement of student performance, EOC test results are also typically reported as the percentage of students scoring "proficient." Students achieving a scale score that falls into the Levels III and IV range (Table 3) are considered proficient according to State Board of Education policy.

Figures 3 and 4 with Tables 6 and 7 show WCPSS proficiency results on each of the eight EOCs since 2005-06. Comparing initial tests, the percentage of WCPSS students scoring in Levels III or IV on EOC exams rose for six subjects (Algebra I, Algebra II, English I, Geometry, Physical Science, and U.S. History), but fell slightly for two subjects (Biology and Civics & Economics) between 2008-09 and 2009-10. The largest improvements were in Physical Science (8.2 percentage points), U.S. History (3.7), and Algebra I (3.5). The decreases in Biology and Civics & Economics were small (0.1 and 0.2 percentage points, respectively). It should be noted that despite these decreases in proficiency, the average scale score average rose for both courses indicating an overall higher quality of performance.

After retests were included, all subjects had higher proficiency rates in 2009-10. The rates ranged from a low of 75.4% proficiency in Physical Science to a high of 83.9% proficiency in Algebra II on the initial tests. After retests, the rates ranged from 81.2 % to 88.7%.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 09-10 09-10 60-80 09-10 09-10 07-08 60-80 90-50 20-90 07-08 60-80 90-90 20-90 07-08 09-10 90-90 20-90 07-08 60-80 90-50 20-90 60-80 20-90 Algebra I English I Civics & Economics U.S. History Biology

Figure 3 WCPSS Core EOC Proficiency Rates, 2005-06 to 2009-10

Note: Percentages are not shown where the scales changed when new tests were introduced.

Retest increase

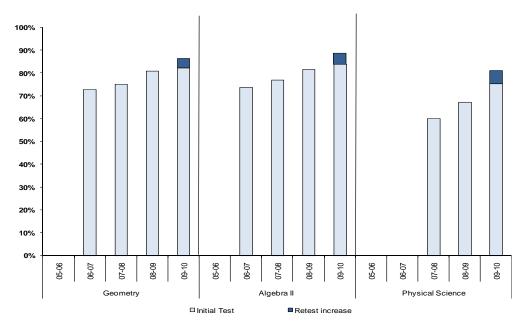
□ Initial Test

Table 6 WCPSS Core EOC Proficiency Rates, 2005-06 to 2009-10

	05-06	06-07	07-08	09-10				
Core Courses		Initia	al Test	Initial Test	Retest Increase	With Retests		
Algebra I	*	74.9%	75.0%	76.7%	80.2%	4.7%	84.9%	
Biology	*	*	76.5%	80.5%	80.4%	3.8%	84.2%	
Civics & Economics	73.0%	75.4%	78.0%	80.4%	80.2%	3.8%	84.0%	
English I		79.9%	78.8%	81.2%	81.7%	3.7%	85.4%	
U.S.History	69.6%	74.2%	74.1%	77.6%	81.3%	4.1%	85.4%	

<sup>\*</sup> Percentages are not shown where the scales changed when new tests were introduced.

Figure 4
WCPSS Elective EOC Proficiency Rates, 2005-06 to 2009-10



Note: Percentages are not shown where the scales changed when new tests were introduced.

Table 7
WCPSS Elective EOC Proficiency Rates, 2005-06 to 2009-10

	05-06	06-07	07-08	09-10			
Elective Courses					Initial	With	
		Initia	al Test		Test	Increase	Retests
Geometry	*	72.8%	75.1%	81.0%	82.2%	4.3%	86.5%
Algebra II	*	73.8%	76.9%	81.6%	83.9%	4.8%	88.7%
Physical Science	*	*	60.1%	67.2%	75.4%	5.8%	81.2%

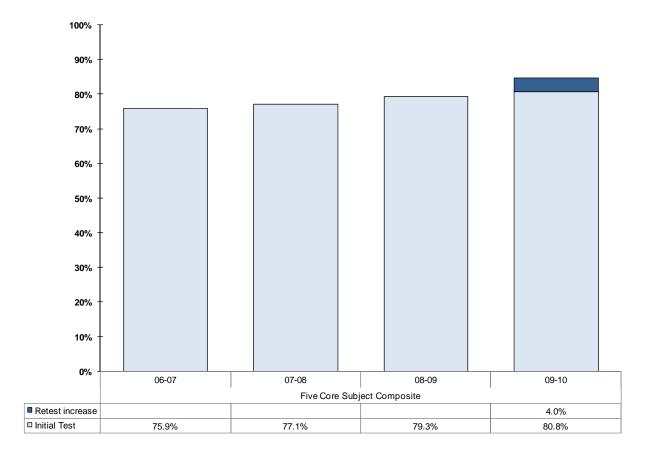
<sup>\*</sup> Percentages are not shown where the scales changed when new tests were introduced.

# COMPOSITE EOC PERFORMANCE OVER TIME

Figure 5 details the trend in overall EOC performance by displaying the percentage of EOC scores at or above Level III across the five core tests (Algebra I, Biology, Civics & Economics, English I, and U.S. History). The students of the incoming 9<sup>th</sup> grade class of 2006-07 (i.e., the Spring 2010 graduating class), were required to pass each of these five tests at some point during their high school careers in order to be eligible for a diploma. As such, these courses were taken by almost every student who completed high school, while the population of students who took the other three tests was often less representative of high school students as a whole.

Of the 50,913 core EOC exams taken by WCPSS students in 2009-10, almost 81% resulted in scores at or above Level III based on the first administration (Figure 5). This represented a slight increase for the third consecutive year. With retests, the 2009-10 proficiency rate increased further to almost 85%.

Figure 5 WCPSS EOC Proficiency Across the Five Core Courses, 2006-07 to 2009-10



#### RESULTS BY SUBGROUP

Figures and tables in Appendix A show the percentage of students who scored at or above Level III (i.e. proficient) on each EOC exam for ethnic student subgroups. The figures and tables in Appendix B show the scale score results for these same tests and ethnic subgroups. Appendices C and D show the proficiency and scale score results for the NCLB subgroups: SWD, LEP, and students receiving free or reduced-price lunch (FRL). The results described in this section are based on the data in those figures and tables. In this report, results for WCPSS's American Indian students are not discussed, even when we are making observations among all ethnic subgroups. American Indian students comprise a very small group, making comparisons difficult because results based on such a small group of students tend to fluctuate widely. Results for American Indian students are however included in the appendices.

#### **ETHNICITY**

Large differences among ethnic groups are evident in both mean scale scores and the percentages of students scoring at Level III or IV on EOC tests. White and Asian students had the highest proficiency rates and mean scale scores on exams in 2009-10 (ranging from 80.3% in Physical Science to 95.4% in Algebra II, based on initial testing). Black/African American students had the lowest proficiency rates and mean scale scores among all racial and ethnic groups on all tests except English I, where Hispanic/Latino students scored lowest. Black/African American proficiency rates on initial tests ranged from 58.4% in Biology to 65.9% in Algebra II. White and Asian students gained between 0.6 and 4.2 percentage points after retests were included, while Black/African American and Hispanic/Latino students gained 5.4 to 8.8 percentage points.

Changes in performance between 2008-09 and 2009-10 varied by group and by course, although most ethnic groups saw increases in both proficiency and average scale scores across the board based on initial testing. In particular, the largest gains on the initial tests were in Physical Science (6 to 12 percentage points) while three subgroups had lower proficiencies in Biology.

The proficiency gap (i.e., the difference in the percentage of students scoring at Level III or IV) between Black/African American students and White students in 2009-10 varied by course, ranging from a low of 24.5 percentage points in Physical Science to 35.4 percentage points in Biology on the initial tests. Compared to 2008-09, the gap narrowed in Algebra I, Algebra II, Civics & Economics, U.S. History, and Physical Science. It remained the same in Geometry and English I, and widened slightly in Biology. The proficiency gaps after retests ranged from a low of 19.4 percentage points in Algebra II to 30.4 percentage points in Biology. With retests included, all gaps were substantially smaller in 2009-10 compared to 2008-09.

#### PROFICIENCY TRENDS BY ETHNICITY—CORE COURSES

In this section as before, results for WCPSS's American Indian students are not discussed. Results for American Indian students are however included in the graphs and tables of Appendices A and B.

# Algebra I

Proficiency percentages for Algebra I initial tests increased in 2009-10 for all ethnic groups (Appendix A, Figure and Table A1). Scores were highest for Asian (94.6%) and White students (92.7%). Overall increases between 2008-09 and 2009-10 were largest for Black/African American students (6.0 percentage points), followed by Multiracial (3.5) and Hispanic/Latino students (3.1). Proficiency rates increased from 0.6 percentage points (Asian) to 8.6 percentage points (Black/African American) after retests. With retests, the proficiency rates ranged from 67.1% for Black/African American students to 95.4% for White students. The proficiency gap before retests between White and Black/African American students was 34.2 percentage points—a decrease of 4.3 percentage points from 2008-09. After retests, the gap was 28.3 percentage points.

# Biology<sup>2</sup>

Biology initial test proficiency rates increased between 2008-09 and 2009-10 for the Multiracial (2.9 percentage points) and White (1.1) ethnic groups (Appendix A, Figure and Table A2). The other three subgroups had rate decreases—Asian (down 2.8), Black/African American students (0.6), and Hispanic/Latino students (0.6). As in past years, White students (93.8%) and Asian students (89.6%) showed the highest overall proficiency rates. The largest rate increases when retests were included were for Black/African American and Hispanic/Latino students at 6.9 and 6.7 percentage points, respectively. After retests, all proficiency rates, with the exception of the Asian rate (down 1.1), were higher than 2008-09 rates and ranged from 65.3% for Black/African American students to 95.8% for White students. The proficiency gap before retests between White and Black/African American students was 35.4 percentage points—an increase of 1.7 percentage points from 2008-09. After retests, the gap was 30.5 percentage points.

#### **Civics & Economics**

Unlike many of the other tests, the Civics & Economics test has remained unchanged since 2005-06. Therefore, we can make comparisons across more years. Proficiency rates on Civics & Economics initial tests increased for all ethnic groups in 2009-10 (Appendix A, Figure and Table A3). In fact, proficiency rates in Civics & Economics have increased every year since 2005-06 for all ethnic groups with the exceptions of Multiracial students in 2006-07 and Asian students in 2007-08. The largest gains between 2008-09 and 2009-10 were seen among Hispanic/Latino students (1.6 percentage points) and Multiracial students (1.4). Initial rates ranged from 60.8% for Black/African American students to 92.8% for White students. Retest increases ranged from 2.4 percentage points for White students to 6.3 percentage points for Black/African American students. The proficiency gap before retests between White and Black/African American students was 32.0 percentage points—a decrease of 0.8 percentage points from 2008-09. After retests, the gap was 28.0 percentage points.

# **English I**

Proficiency rates on English I initial tests increased for all ethnic subgroups except Asian students (down 3.5 percentage points) in 2009-10 (Appendix A, Figure and Table A4). The

<sup>2</sup> A new test for Biology was introduced in 2007-08, but it did not have the negative impact on scores observed historically with most new tests. Even so, comparisons should not be made to earlier years.

increases were generally small—ranging from 0.1 percentage points for Hispanic/Latino students to 0.5 percentage points for Black/African American and White students. White students were the only ethnic subgroup to post a proficiency rate above 90%. Before retests, rates ranged from 61% for Hispanic/Latino students to 94.4% for White students. After retests, the Asian rate was still below the 2008-09 rate. The largest gains from retests were among Black/African American students (7.3 percentage points) and Hispanic/Latino students (5.4 percentage points). After retests, rates ranged from 66.4% for Hispanic/Latino students to 96.1% for White students. The proficiency gap between White and Black/African American students before retests was 29.5 percentage points—the same as in 2008-09. After retests, the gap was 23.9 percentage points.

# **U.S. History**

Like Civics & Economics, U.S. History is the other test that has been in place consistently since 2005-06. Proficiency rates have risen in U.S. History for every ethnic group every year since 2005-06, with the exception of White students in 2007-08 and Multiracial students in 2008-09 (Appendix A, Figure and Table A5). The largest gains in proficiency on initial tests in 2009-10 were found among Black/African American students (6.6 percentage points), Multiracial students (4.0), and White students (3.5). Black/African American students also had the largest additional gain in proficiency from retests (6.8 percentage points) along with Hispanic/Latino students (5.8). Since 2005-06, White students have had the highest U.S. History proficiency rates among all ethnic groups each year, ranging from 80.6% to a high of 92.6% in 2009-10. The proficiency gap before retests between White and Black/African American students was 32.6 percentage points—down 3.1 percentage points from 2008-09. After retests, the gap was 28.4 percentage points.

#### **NON-CORE COURSES**

### Algebra II

Algebra II results have also shown improvement for all ethnic groups since the current test was introduced in 2006-07, except for Hispanic/Latino students (down 1.4 percentage points) in the most recent year 2009-10 (Appendix A, Figure and Table A6). Increases in proficiency between 2008-09 and 2009-10 in particular were greatest for Black/African American students (3.6 percentage points). Again, Black/African American students benefitted the most from retests (8.8 percentage points). Hispanic/Latino students gained 6.9 percentage points from retests. All ethnic groups showed improvement in 2009-10 after retests. Asian students had the highest proficiency rates (95.4% before retests, and 96.5% after). White students had a proficiency rate above 90% for the first time (90.6% before retests and 94.1% after). The proficiency gap before retests between White and Black/African American students was 24.7 percentage points—down 1.1 percentage points from 2008-09, after retests, the gap was 19.4 percentage points.

# Geometry

Proficiency rates for Geometry have increased each year among all ethnic groups since the most recent edition of the test was introduced in 2006-07 (Appendix A, Figure and Table A7). Between 2008-09 and 2009-10 the increases in proficiency rates on initial tests were largest for Asian students (1.9 percentage points), and Hispanic/Latino students (1.6). The highest rates in 2009-10 were for Asian students (94.6%) and White students (92.1%). Retest gains ranged from

1.2 percentage points for Asian students to 7.0 and 8.8 percentage points for Hispanic/Latino and Black/African American students, respectively. The proficiency between White and Black/African American students before retests was 32.6 percentage points—no change from 2008-09. After retests, the gap was 26.3 percentage points.

# **Physical Science**

A new test for Physical Science was implemented in 2007-08 (Appendix A, Figure and Table A8). All subgroups had large proficiency gains on initial tests in 2009-10, particularly Asian (12.2 percentage points) and Black/African-American students (10.8). Proficiency rates in 2009-10 ranged from 64.5% for Black/African American students to 89.0% for White students. Asian and Multiracial students also had rates above 80% for the first time. After retests, rates ranged from 71.9% to 92.3%. The proficiency gap between White and Black/African American students before retests was 24.5 percentage points—down 5.5 percentage points from 2008-09. After retests, the gap was 20.4 percentage points.

# STUDENTS WITH DISABILITIES (SWD)

Comparing 2009-10 initial test scores to 2008-09 scores, students with disabilities made gains in proficiency in four EOC courses (Algebra I, Biology, U.S. History, and Physical Science) while dropping in proficiency in four EOC courses (Civics & Economics, English I, Algebra II, and Geometry). The largest gain was in Physical Science, where initial test scores rose by 6.7 percentage points. The percentage of students with disabilities (SWD) scoring proficient was highest in Algebra II (68.3%), and surpassed 60% in three other subject areas: Geometry (66.2%), Physical Science (63.1%), and U.S. History (61.5%). The lowest proficiency rate for this group was in English I (50.1%). This subgroup benefitted greatly from retests—gaining from 5.4 to 8.0 percentage points in the eight courses. The percentage of students with disabilities (SWD) scoring proficient after retesting was highest in Algebra II (75.6%), and reached 70% in two other subject areas: Geometry (73.7%) and Physical Science (70.0%). The lowest proficiency rate after retests was in English I (56.7%, 28.7 percentage points lower than the overall proficiency rate). Scale score averages on initial tests were higher in 2009-10 compared to 2008-09 in five courses (Algebra I, English I, U.S. History, Geometry, and Physical Science).

#### STUDENTS WITH LIMITED ENGLISH PROFICIENCY (LEP)

LEP students had lower proficiency rates on seven of the eight EOC tests in 2009-10 compared to 2008-09. The changes ranged from 3.7 percentage points in Physical Science to 14.6 percentage points in Biology. There was a 0.1 percentage point gain in Algebra II. Average scale scores decreased in all courses except Physical Science, where the average did not change. After retests were included, only Algebra I, Algebra II, and Physical Science had higher proficiency rates than in 2008-09. On initial tests, the highest proficiency rate for LEP students in 2009-10 was in Algebra II (71.9%). The lowest proficiency rates were in Civics & Economics (38.1%) and English I (37.8%). After retests, the proficiency rates ranged from 43.3% in English I to 77.1% in Algebra II. It should be noted that although the total number of tests given in 2009-10 was only six less than in 2008-09, the number of students identified as LEP decreased by 621 (16.7% decrease). This is probably due to a change in LEP identification criteria which was implemented in 2009-10.

### STUDENTS ELIGIBLE FOR FREE OR REDUCED-PRICE LUNCH (FRL)

On initial tests, FRL students showed gains in average scale scores and proficiency in seven of eight courses in 2009-10. Gains in proficiency between 2008-09 and 2009-10 ranged from 1.8 and 2.2 percentage points in Biology and Civics & Economics to 7.3 and 12.6 percentage points in U. S. History and Physical Science, respectively. English I dropped 0.3 percentage points in proficiency and had the same average scale score compared to scores in 2008-09. All courses had higher proficiency rates than those in 2008-09 after retesting. The after-retest proficiency rates ranged from 65.8% in U.S. History to 77.1% in Algebra II. It should be noted that although the total number of tests given in 2009-10 was six less than in 2008-09, the number of students identified as FRL increased by 2,993 (18.7% increase). This is probably due to a statewide change to more accurate identification methods used to determine students eligible for free or reduced priced lunch which was implemented in 2009-10.

#### RESULTS BY GENDER AND ETHNICITY

The figures and tables in Appendix E show the percentages of students who scored at or above Level III (i.e., proficient) on each core EOC exam by gender and ethnicity for the most recent two years of testing. The results described in this section are based on these data. Again, American Indian subgroups comprise very small numbers, making comparisons unfeasible. Results for American Indian students are however included in Appendix E.

Comparing 2009-10 scores to those of 2008-09, both male and female students had proficiency gains on initial tests in all five core courses in 2009-10 with the exception of females in Biology (down 0.2 percentage points), and males and females in Civics & Economics (males, down 0.5; females, no change). The increases were largest in U.S. History (4.1 percentage points for males and 3.2 for females), and Algebra I (3.8 for males and 3.3 for females). After retests, all gender subgroups showed improvement.

#### **GAPS**

Overall males outperformed females in Biology, Civics & Economics, and U.S. History, while females outperformed males in English I. There was little gender difference in performance in Algebra I overall with differences occurring within ethnic subgroups. The largest gaps were in English I (females were 7.2 percentage points higher before retests and 6.0 percentage points higher after retests) and U.S. History (males 7.0 higher before retests and 5.6 after).

# **Gender by Ethnicity Gaps**

In Algebra I, males were 0.1 of a percentage point higher than females on the initial tests, but were 1.1 percentage points lower than females after retests. This gap change also occurred among White students (0.5 of a percentages point with males higher, to 1.1 with females higher). Asian and Hispanic/Latino males scored higher than females both on initial and retests than their female counterparts. Black/African American and Multiracial females scored higher than males before and after retests. The largest gap was between Multiracial females and males (6.3 percentage points on initial tests and 10.0 after retests).

In the other four core courses, the gaps had males higher in Biology, Civics & Economics, and U.S. History, while females were higher in English I across all ethnic subgroups both before and after retests except for the Asian subgroup in English I, where females were higher before retests and males were higher after retests. In Biology, the gap between White males and females went from 0.9 percentage points to 0.1 after retests. The largest of all the gender by ethnicity gaps was between Black/African American females and males in English I (13.4 percentage points before retests and 11.0 after).

#### **EFFECTS OF RETESTS**

As mentioned previously, for the first time in 2009-10 the North Carolina Department of Public Instruction (NCDPI) chose to include EOC retest results into each school's official accountability measures. Specifically, if a student did not pass the test on the first administration and was subsequently retested, the higher of the two scores became the official score of record for the school's publicly-reported proficiency rates under the ABCs and AYP. All students who scored at Level II on their first attempt were retested and students who scored at Level I could request a retest.

In WCPSS, 71,027 initial EOC tests were taken, with 81.0% scoring proficient, and 10,518 retests were administered. On those 10,518 retests, only 28.9% were proficient. Retest proficiency by course ranged from 25.5% in Civics & Economics to 37.0% in Algebra II (Table 8). The final combined proficiency rates improved an average of almost 5 percentage points (from 3.7 in English I to 5.8 in Physical Science).

Table 8
Number and Percentage Proficient of Initial Tests and Retests
WCPSS Courses 2009-10

	Ini	tial tests	F	Retests	Combin	ned (best score)
Courses	#	% proficient	#	% proficient	#	% proficient
Core						
Algebra I	10,463	80.2%	1,582	30.6%	10,463	84.9%
Biology	10,033	80.4%	1,527	25.7%	10,033	84.2%
Civics and Economics	10,392	80.2%	1,585	25.5%	10,392	84.0%
English I	10,736	81.7%	1,496	27.5%	10,736	85.4%
U.S. History	9,289	81.3%	1,457	25.6%	9,289	85.4%
Elective						
Algebra II	8,598	83.9%	1,123	37.0%	8,598	88.7%
Geometry	7,981	82.2%	1,106	31.5%	7,981	86.5%
Physical Science	3,535	75.4%	642	32.1%	3,535	81.2%
Total	71,027	81.0%	10,518	28.9%	71,027	85.3%

Due to the fact that only non-proficient students were allowed to retest, some subgroups had a disproportionate number of retests compared to other groups. Students identified as qualifying for free or reduced price lunch took 52.6% of the retests, but only 26.1% of the initial tests. The SWD subgroup, Black/African American males, and Black/African American females had their proportion of tests double during retesting. In the LEP subgroup, the proportion of retests taken was almost three times the proportion of initial tests. Asian and White subgroups' proportion of retests was half that of initial tests (Table 9).

The percentage of success on the retests ranged from 12.5% for American Indian females to 43.5% for White females. Although the overall proficiency rate on retests was 28.9%, 12 of the 15 subgroups in Table 9 were below this rate. Multiracial females, White females, and White males were the only subgroups above 30% proficiency.

Table 9
Number and Percentage Proficient of Initial Tests and Retests
WCPSS Subgroups 2009-10

		Initial te	ests		Retes	ts
		% of total			total	
Subgroup	#	tests	% proficient	#	tests	% proficient
American Indian Males	111	0.2%	76.6%	18	0.2%	16.7%
American Indian Females	98	0.1%	86.7%	8	0.1%	12.5%
Asian Males	2,063	2.9%	91.7%	125	1.2%	27.2%
Asian Females	1,949	2.7%	89.9%	167	1.6%	20.4%
Black/African American Males	9,883	13.9%	61.0%	2,831	26.9%	26.1%
Black/African American Females	10,178	14.3%	61.6%	3,133	29.8%	24.8%
Hispanic/Latino Males	3,087	4.3%	66.9%	732	7.0%	25.8%
Hispanic/Latino Females	3,193	4.5%	66.7%	826	7.9%	25.3%
Multiracial Males	1,283	1.8%	84.5%	157	1.5%	25.5%
Multiracial Females	1,342	1.9%	83.3%	186	1.8%	30.6%
White Males	19,325	27.2%	93.1%	1,049	10.0%	37.4%
White Females	18,515	26.1%	92.1%	1,286	12.2%	43.5%
FRL	18,526	26.1%	61.7%	5,529	52.6%	24.6%
LEP	3,101	4.4%	46.3%	1,266	12.0%	16.3%
SWD	7,352	10.4%	57.4%	2,383	22.7%	22.4%

#### COMPARISON OF MIDDLE SCHOOL TO HIGH SCHOOL ALGEBRA I

Appendix F has one figure and three tables that compare the results of Algebra I EOCs in middle and high school. Of the 10,463 students that took Algebra I in 2009-10, 31.7% (3,317) took it in middle school. In middle school, White and Asian students took 81.2% of the tests, while Black/African American and Hispanic/Latino students took 14.7% of the tests. In high school, the percentage of tests taken by White and Asian students dropped to 48.1% as the Black/African American and Hispanic/Latino students also took 48.1% of the tests. In middle school, FRL

students took 10.4% of the tests compared to 36.6% in high school. The LEP portion went from 0.9% to 7.1% and the SWD portion from 2.0% to 15.2% (Appendix F, Table F2).

On initial tests, middle school students had proficiency rates ranging from 93.1% (LEP students) to 99.8% (Asian Students). High school students initial rates ranged from 45.3% (LEP students) to 88.4% (White students; Appendix F, Table F2). Fifty-five middle school students were retested and 34 (61.8%) scored proficient on the retest. In high school, 1,527 students were retested with a 29.4% success rate (Appendix F, Table F3).

Overall after retests were included, 99.1% of middle school students scored proficient compared to 78.2% of high school students. The range in proficiency was 96.5% (FRL) to 100% (Asian) in middle school and 52.9% (LEP) to 92.4% (White) in high school (Appendix F, Figure F1 and Table F1).

#### COMPARISON OF WCPSS EOC PERFORMANCE TO OTHER DISTRICTS

Figure G1 in Appendix G displays that on the five core EOC exams in 2009-10 WCPSS had a higher proficiency rate than the statewide proficiency rate in all five courses. Compared to six other large and/or neighboring North Carolina districts, WCPSS performed second only to Chapel Hill/Carrboro in Algebra I and Civics & Economics. WCPSS performance ranked third in Biology, English I, and U.S. History.

The WCPSS 2009-10 EOC multiple-choice performance composite across all eight EOCs (85.3%) was second only to Chapel Hill (90.0%). White, male, and female subgroups were also second to Chapel Hill. WCPSS had the highest performance composite for Asian students (92.4%) and SWD students (64.2%) and ranked third for Black/African American and Multiracial students. The composite was above the state composite for all subgroups with the exception of Hispanic/Latino, FRL, and LEP subgroups. The ranking among the seven districts was fourth for these subgroups.

#### SUMMARY AND DISCUSSION

#### **PERFORMANCE**

EOC scale scores on the initial tests before retests were included rose for the third consecutive year in 2009-10 in all eight subjects tested. The percentage of WCPSS students scoring in Levels III or IV on initial tests rose for six subjects (Algebra I, Algebra II, English I, Geometry, Physical Science, and U.S. History), but fell slightly for two subjects (Biology and Civics & Economics) between 2008-09 and 2009-10. Of the 50,913 core EOC exams taken by WCPSS students in 2009-10 (Algebra I, Biology, Civics & Economics, English I, and U.S. History), almost 81% of the initial tests resulted in scores at or above Level III (a slight increase from 2008-09).

Changes in performance between 2008-09 and 2009-10 varied by ethnic subgroup by course, although most ethnic groups saw increases in both proficiency and average scale scores across the board. The fact that most proficiency rates and scale scores are increasing suggests that these improvements—measured both quantitatively (higher percentage of students at grade level) and

qualitatively (increases in average scale scores)—are occurring across the entire spectrum of achievement.

Of the three NCLB subgroups, economically disadvantaged students (FRL) showed the most improvement when comparing 2009-10 initial test scores to 2008-09 scores. FRL students showed gains in average scale scores and proficiency in seven of eight courses in 2009-10 (all but English I). Students with disabilities made gains in proficiency in four EOC courses (Algebra I, Biology, U.S. History, and Physical Science) while dropping in proficiency in four EOC courses (Civics & Economics, English I, Algebra II, and Geometry). LEP students had lower proficiency rates on seven of the eight initial tests (all but Algebra II). It should be noted that new identification methods for FRL and LEP students may have changed the comparison groups.

Both male and female students had proficiency gains on initial tests in all five core courses in 2009-10 with the exception of females in Biology (down 0.2 percentage points) and females in Civics & Economics (no change).

### **GAPS**

There were still large gaps among ethnic groups in both mean scale scores and the percentage of students scoring at Level III or IV on EOC tests. The proficiency gap (i.e., the difference in the percentage of students scoring at Level III or IV) between Black/African American students and White students in 2009-10 varied by course, ranging from 24.5 percentage points in Physical Science to 35.4 percentage points in Biology on the initial tests. Compared to 2008-09, the gap narrowed in Algebra I, Algebra II, Civics & Economics, U.S. History, and Physical Science. It remained the same in Geometry and English I and widened slightly in Biology.

A gender gap was present in four of the five core courses as well. Males outperformed females in Biology, Civics & Economics, and U.S. History, with females outperforming males in English I. There was little gender difference in performance in Algebra I overall with differences occurring within ethnic subgroups.

Despite gains of the last three to five years, Hispanic/Latino students, students from lower-income backgrounds, and students with limited English proficiency are scoring below the state rates. The LEP subgroup is barely above 50% proficient. EOC testing results are often used as one indicator of the extent to which high school students are being prepared for their future, whether that future involves postsecondary education or some other calling. The results of the last few years are certainly commendable and trending in the right direction for most historically low-performing subgroups. Yet these same subgroups are the ones that are growing fastest in number and proportion in the WCPSS student population, making it crucial that efforts be made to accelerate progress among these subgroups. Success rates for these subgroups of students must continue to improve to ensure that students from all walks of life are leaving school with the tools they need to achieve their full potential.

#### RETESTS

For the first time in 2009-10, all students who scored at Level II on EOCs were retested and students who scored at Level I could request a retest. In WCPSS, 71,027 initial EOC tests were taken with 81.0% scored proficient, and 10,518 retests administered. The final proficiency rates reported used the higher of the initial and retest scores for those students who took two tests. The final combined proficiency rates improved the overall course rates an average of almost 5 percentage points (from 3.7 in English I to 5.8 in Physical Science). After retests were included, all subjects had higher proficiency rates in 2009-10 than in 2008-09. The rates ranged from a low of 75.4% in Physical Science to a high of 83.9% in Algebra II on the initial tests. After retests, the rates ranged from 81.2 % to 88.7% (Appendix A). These proficiency rates were used in ABCs and AYP reporting.

Most students who were retested were unsuccessful for a second time. The overall retest proficiency rate was only 28.9%. Some subgroups had a disproportionate number of retests compared to other groups. Students identified as qualifying for free or reduced price lunch took 52.6% of the retests, but only 26.1% of the initial tests. In the LEP subgroup, the proportion of retests taken was almost three times the proportion of initial tests. The proportion of Black/African American and Hispanic/Latino students doubled while the proportion of White and Asian students was less than half.

### **Effects on Gaps**

The benefit of retesting was also disproportionate across subgroups. White and Asian students gained between 0.6 and 4.2 percentage points, while Black/African American and Hispanic/Latino students gained 5.4 to 8.8 percentage points. After retests, the proficiency gaps (i.e., the difference in the percentage of students scoring at Level III or IV) between Black/African American students and White students were substantially smaller in 2009-10 compared to 2008-09, narrowing from 3 percentage points in Biology to 11 in Algebra I. Remember that proficiency is a quantitative measure of how many students are at grade level. Studying the gaps in average scale scores adds to our understanding a measure of qualitative differences in performance (e.g., if a student is barely proficient at the lower end of level III or performing in a superior manner in level IV). Even after retests were included in 2009-10, the gap in average scale scores between Black/African American students and White students narrowed by less than one scale score point in four of the eight EOC tests, by less than two points in six, and widened in Biology and Geometry (Table 10).

Table 11 compares these scale score averages to the cut points for Level III (proficient) and Level IV (superior performance). In all eight subjects, Black/African American student averages were only two to four points into Level III and 7 to 10 points below Level IV. The White students' averages were within three scale points of Level IV for all eight subjects (within one scale score point of Level IV for five of the eight). We can conclude that retesting indicates that more students are proficient, but the qualitative differences in performance have changed very little. A more detailed study of proficiency gaps compared to scale score gaps is being prepared and should be available in Spring 2011.

Table 10
Proficiency and Scale Score Gaps
Black/African American Students Compared to White Students

		Per	centage a	at Level	III or IV							
Course	Black/A	African A	American		White					Gaps		
Course	08-09	09	9-10	08-09	09	-10	08-09	09	9-10		Chang	е
											09-10	
												08-09 Initial
											09-10	to 09-10
_	Initial	Initial	With	Initial	Initial	With	Initial	Initial	With	08-09 to	With	With
Core	Test	Test	Retests	Test	Test	Retests	Test	Test	Retests	09-10	Retests	Retests
Algebra I (All Students)	52.5%	58.5%	67.1%	91.0%	92.7%	95.4%	38.5%	34.2%	28.3%	-4.3%	-5.9%	-10.2%
Biology		58.4%	65.3%	92.7%	93.8%	95.8%		35.4%	30.5%	1.7%	-4.9%	-3.2%
Civics and Economics			67.1%	92.7%	92.8%	95.2%	32.8%	32.0%	28.1%	-0.8%	-3.9%	-4.7%
English I	64.4%	64.9%	72.2%	93.9%	94.4%	96.1%	29.5%	29.5%	23.9%	0.0%	-5.6%	-5.6%
U.S. History	53.4%	60.0%	66.8%	89.1%	92.6%	95.2%	35.7%	32.6%	28.4%	-3.1%	-4.2%	-7.3%
Elective												
Geometry		59.5%	68.3%	90.7%	92.1%	94.6%		32.6%	26.3%	0.0%	-6.3%	-6.3%
Algebra II	62.3%	65.9%	74.7%	91.0%	92.7%	95.4%	28.7%	26.8%	20.7%	-1.9%	-6.1%	-8.0%
Physical Science	53.7%	64.5%	71.9%	82.7%	89.0%	92.3%	29.0%	24.5%	20.4%	-4.5%	-4.1%	-8.6%
			Scale Sco	re Aver								
Course	Black/A	African A	American		White		Gaps					
33333	08-09	09	9-10	08-09	09	-10	08-09	09	9-10	Cha		
											09-10	
												08-09 Initial
		l					l	l			09-10	to 09-10
	Initial	Initial	With	Initial	Initial	With	Initial	Initial	With	08-09 to	With	With
Core	Test	Test	Retests	Test	Test	Retests	Test	Test	Retests	09-10	Retests	Retests
Algebra I (All Students)	148.3	149.7	150.6	160.2	160.5	160.7	11.9	10.8	10.1	-1.1	-0.7	-1.8
Biology	150.5	148.4	149.2	158.9	159.5	159.7	8.4	11.1	10.5	2.7	-0.6	2.1
Civics and Economics	149.9	150.2	150.8	159.3	159.8	160.0	9.4	9.6	9.2	0.2	-0.4	-0.2
English I	148.3	148.4	149.1	157.7	157.7	157.8	9.4	9.3	8.7	-0.1	-0.6	-0.7
U.S. History	149.5	150.9	151.6	158.3	159.8	160.0	8.8	8.9	8.4	0.1	-0.5	-0.4
Elective	1 10 -		1505	150.5	1505	400.5		40.				
Geometry	149.2	149.4	150.3	158.8	159.8	160.0	9.6	10.4	9.7	8.0	-0.7	0.1
Algebra II	148.9	149.7	150.7	157.1	157.6	157.8	8.2	7.9	7.1	-0.3	-0.8	-1.1
Physical Science	149	151.1	151.9	155.5	157.4	157.7	6.5	6.3	5.8	-0.2	-0.5	-0.7

Table Interpretation: In 2008-09, the proficiency gap in U.S. History between Black/African American and White students was 35.7 percentage points. In 2009-10, on the initial testing the gap was 3.1 percentage points lower at 32.6. When retests were included, the gap decreased 4.2 percentage points more to 28.4 for a total 7.3 percentage points less than in 2008-09.

Table 11 Comparison of Scale Score Averages to Level III and Level IV Range

							Scale S	core Av	/erage						
Course		Black/African American							White						
Course		08-09		09	9-10				08-09			09-1	0		
		Points	Points			Points	Points		Points	Points			Points	Points	
		Above	Above			Above	Above		Above	Above			Above	Above	
		Level III	Level IV			Level III	Level IV		Level III	Level IV			Level III	Level IV	
	Initial	cut	cut	Initial	With	cut	cut	Initial	cut	cut	Initial	With	cut	cut	
Core	Test	point	point	Test	Retests	point	point	Test	point	point	Test	Retests	point	point	
Algebra I (All Students)	148.3	0.3	-9.7	149.7	150.6	2.6	-7.4	160.2	12.2	2.2	160.5	160.7	12.7	2.7	
Biology	150.5	3.5	-8.5	148.4	149.2	2.2	-9.8	158.9	11.9	-0.1	159.5	159.7	12.7	0.7	
Civics and Economics	149.9	1.9	-10.1	150.2	150.8	2.8	-9.2	159.3	11.3	-0.7	159.8	160	12	0	
English I	148.3	2.3	-8.7	148.4	149.1	3.1	-7.9	157.7	11.7	0.7	157.7	157.8	11.8	8.0	
U.S. History	149.5	0.5	-10.5	150.9	151.6	2.6	-8.4	158.3	9.3	-1.7	159.8	160	11	0	
Elective															
Geometry	149.2	1.2	-8.8	149.4	150.3	2.3	-7.7	158.8	10.8	8.0	159.8	160	12	2	
Algebra II	148.9	1.9	-9.1	149.7	150.7	3.7	-7.3	157.1	10.1	-0.9	157.6	157.8	10.8	-0.2	
Physical Science	149	0	-11	151.1	151.9	2.9	-8.1	155.5	6.5	-4.5	157.4	157.7	8.7	-2.3	

Table Interpretation: In 2008-09, the U.S. History average scale score for Black/African American students was 0.5 points into Level III, but 10.5 points below Level IV. In 2009-10, after the inclusion of retests, the average had increased to 2.6 points above Level III and 8.4 points below Level IV

The proficiency gap between middle school Algebra I students and high school Algebra I students was also much smaller in 2009-10 compared to 2008-09, narrowing from 29.1 to 20.9 percentage points after retests were included. High school Algebra I students gained 9.3 percentage points from retests while middle school students gained only 1.4 percentage points. The proficiency gap between middle school and high school was also larger for Black/African American students than for White students (33.0 percentage points compared to 7.2; Table 12). The average scale score gap narrowed by only1.4 points and remained large at 11.7 points. The middle school scale score average is 7.3 points above the Level IV cut point while the high school average is in the middle of the Level III range (4.4 points below Level IV). There was also a substantial scale score gap between Black/African American and White students at both the middle school and the high school level (Table 13).

Table 12
Proficiency and Scale Score Gaps
Middle School Students Compared to High School Students

		Per	centage a								
Course	Black/A	African A	<b>A</b> merican		White		Al	All Students			
oodi se	08-09	09	9-10	08-09	09	-10	08-09	09	9-10		
	Initial	Initial	With	Initial	Initial	With	Initial	Initial	With		
Core	Test	Test	Retests	Test	Test	Retests	Test	Test	Retests		
Algebra I (All Students)	52.5%	58.5%	67.1%	91.0%	92.7%	95.4%	76.7%	80.2%	84.9%		
Algebra I (Middle School)	91.5%	93.8%	96.1%	98.9%	98.8%	99.6%	97.9%	98.1%	99.1%		
Algebra I (High School)	48.0%	53.6%	63.1%	88.1%	88.4%	92.4%	68.9%	71.9%	78.2%		
Gap between Middle and High	43.5%	40.2%	33.0%	10.8%	10.4%	7.2%	29.1%	26.2%	20.9%		
		,	Scale Sco	re Aver	age						
Course	Black/A	African A	American		White		All Students				
oodi se	08-09	09	9-10	08-09	09	-10	08-09	09	9-10		
	Initial	Initial	With	Initial	Initial	With	Initial	Initial	With		
Core	Test	Test	Retests	Test	Test	Retests	Test	Test	Retests		
Algebra I (All Students)	148.3	149.7	150.6	160.2	160.5	160.7	155.9	156.8	157.3		
Algebra I (Middle School)	158.7	159.1 159.3		165.3	165.2	165.3	165.1	165.0	165.3		
Algebra I (High School)	147.0 148.4 149.4			157.1	157.2	157.5	152.0	153.0	153.6		
Gap between Middle and High	11.7	10.7	9.9	8.2	8.0	7.8	13.1	12.0	11.7		

Table 13 Comparison of Scale Score Averages to Level III and Level IV Range

		Scale Score Average																			
Course		Black/African American White All Students																			
Course		08-09 09-10 08-09 09-10					08-09			09-10											
		Points	Points			Points	Points		Points	Points			Points	Points		Points	Points			Points	Points
		Above	Above			Above	Above		Above	Above			Above	Above		Above	Above			Above	Above
		Level	Level IV			Level III	Level IV		Level III	Level IV			Level III	Level IV		Level III	Level IV			Level III	Level IV
	Initial	III cut	cut	Initial	With	cut	cut	Initial	cut	cut	Initial	With	cut	cut	Initial	cut	cut	Initial	With	cut	cut
Core	Test	point	point	Test	Retests	point	point	Test	point	point	Test	Retests	point	point	Test	point	point	Test	Retests	point	point
Algebra I (All Students)	148.3	0.3	-9.7	149.7	150.6	2.6	-7.4	160.2	12.2	2.2	160.5	160.7	12.7	2.7	155.9	7.9	-2.1	156.8	157.3	9.3	-0.7
Algebra I (Middle School)	158.7	10.7	0.7	159.1	159.3	11.3	1.3	165.3	17.3	7.3	165.2	165.3	17.3	7.3	165.1	17.1	7.1	165.0	165.3	17.3	7.3
Algebra I (High School)	147.0	-1.0	-11.0	148.4	149.4	1.4	-8.6	157.1	9.1	-0.9	157.2	157.5	9.5	-0.5	152.0	4.0	-6.0	153.0	153.6	5.6	-4.4

There are both pros and cons to retesting. The main effect of retests is a quantitative improvement not a qualitative one. Schools are able to use the higher performance rates in both their ABCs and AYP reporting. The 28.9% of students who score proficient on retests receive a boost to their grades and their confidence about moving forward in courses. On the other hand, the vast majority of students were unsuccessful a second time. This probably further undermined their students' perception of their ability in the course. Retesting is costly in time and money. Are the positives worth the negative expense? Would using the standard error of measure be less costly?

EOC Results, 2008-09 E&R Report No. 10.04

# APPENDIX A

Figure A1
Ethnicity Proficiency Rates—Algebra I 2006-07 to 2009-10

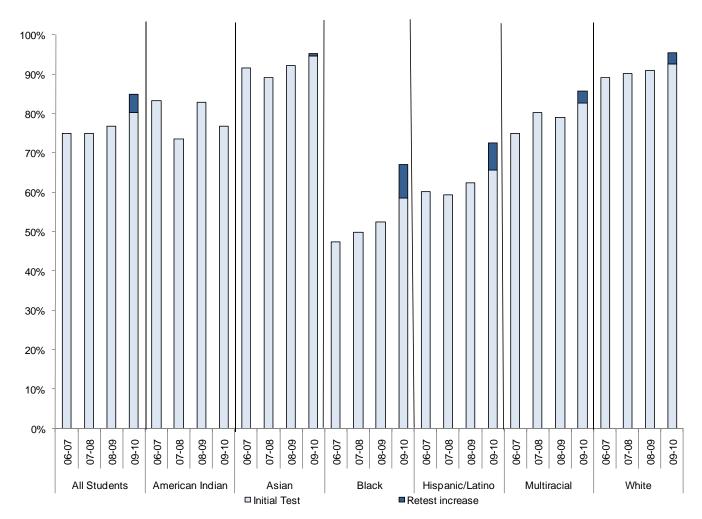


Table A1
Ethnicity Proficiency Rates—Algebra I 2006-07 to 2009-10

	06-07	07-08	08-09	09-10				
Algebra I	In	itial Te	st	Initial Test	Retest Increase	With Retests		
All Students	74.9%	75.0%	76.7%	80.2%	4.7%	84.9%		
American Indian	83.3%	73.5%	82.9%	76.7%	0.0%	76.7%		
Asian	91.6%	89.2%	92.1%	94.6%	0.6%	95.2%		
Black/African American	47.5%	49.9%	52.5%	58.5%	8.6%	67.1%		
Hispanic/Latino	60.1%	59.4%	62.5%	65.6%	6.9%	72.5%		
Multiracial	74.9%	80.3%	79.1%	82.6%	3.1%	85.7%		
White	89.1%	90.2%	91.0%	92.7%	2.7%	95.4%		

Figure A2
Ethnicity Proficiency Rates—Biology 2007-08 to 2009-10

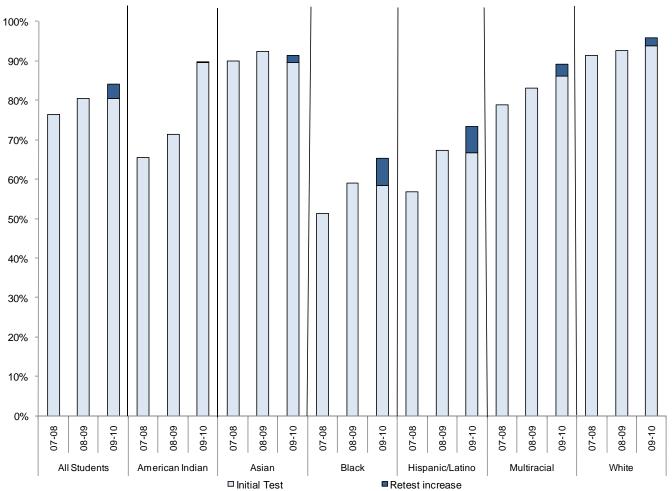


Table A2
Ethnicity Proficiency Rates—Biology 2007-08 to 2009-10

	07-08	08-09		09-10	
Biology			Initial	Retest	With
	Initia	l Test	Test	Increase	Retests
All Students	76.5%	80.5%	80.4%	3.8%	84.2%
American Indian	65.4%	71.4%	89.6%	0.1%	89.7%
Asian	90.0%	92.4%	89.6%	1.7%	91.3%
Black/African American	51.4%	59.0%	58.4%	6.9%	65.3%
Hispanic/Latino	56.8%	67.3%	66.7%	6.7%	73.4%
Multiracial	78.9%	83.2%	86.1%	3.0%	89.1%
White	91.4%	92.7%	93.8%	2.0%	95.8%

Figure A3
Ethnicity Proficiency Rates—Civics & Economics 2005-06 to 2009-10

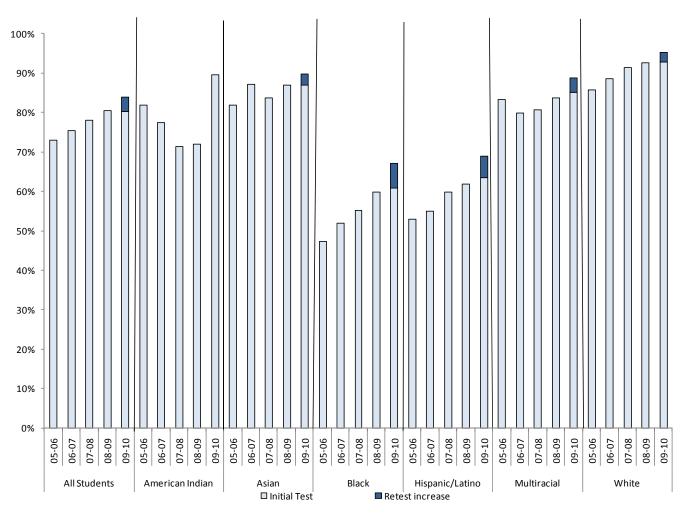


Table A3
Ethnicity Proficiency Rates—Civics & Economics 2005-06 to 2009-10

	05-06	06-07	07-08	08-09		09-10	
Civics/ Economics					Initial	Retest	With
		Initia	l Test		Test	Increase	Retests
All Students	73.0%	75.4%	78.0%	80.4%	80.2%	3.8%	84.0%
American Indian	81.8%	77.4%	71.4%	71.9%	89.5%	0.0%	89.5%
Asian	81.9%	87.1%	83.8%	86.9%	87.0%	2.8%	89.8%
Black/African American	47.3%	51.9%	55.2%	59.9%	60.8%	6.3%	67.1%
Hispanic/Latino	52.9%	54.9%	59.8%	61.9%	63.5%	5.4%	68.9%
Multiracial	83.3%	79.9%	80.7%	83.7%	85.1%	3.7%	88.8%
White	85.7%	88.5%	91.5%	92.7%	92.8%	2.4%	95.2%

Figure A4
Ethnicity Proficiency Rates—English I 2006-07 to 2009-10

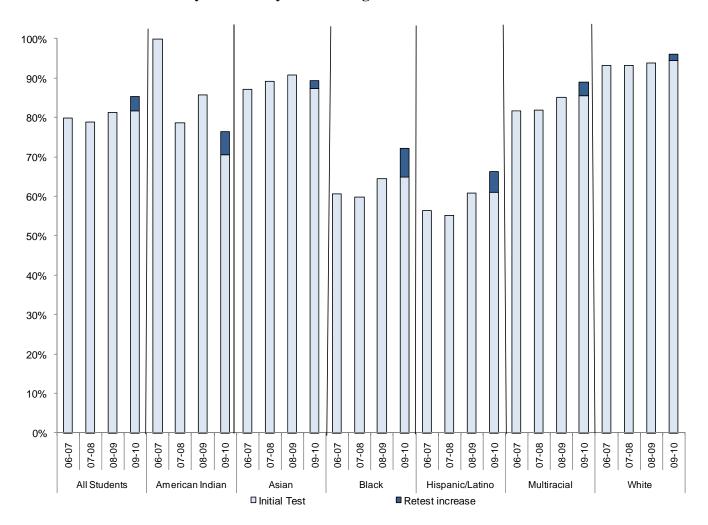


Table A4
Ethnicity Proficiency Rates—English I 2006-07 to 2009-10

	06-07	07-08	08-09		09-10	
English I	lni	tial Tes	st	Initial Test	Retest Increase	With Retests
All Students	79.9%	78.8%	81.2%	81.7%	3.7%	85.4%
American Indian	100.0%	78.6%	85.7%	70.6%	5.9%	76.5%
Asian	87.2%	89.2%	90.8%	87.3%	2.0%	89.3%
Black/African American	60.7%	59.8%	64.4%	64.9%	7.3%	72.2%
Hispanic/Latino	56.3%	55.2%	60.9%	61.0%	5.4%	66.4%
Multiracial	81.6%	81.9%	85.1%	85.5%	3.5%	89.0%
White	93.2%	93.2%	93.9%	94.4%	1.7%	96.1%

Figure A5
Ethnicity Proficiency Rates—U.S. History 2005-06 to 2009-10

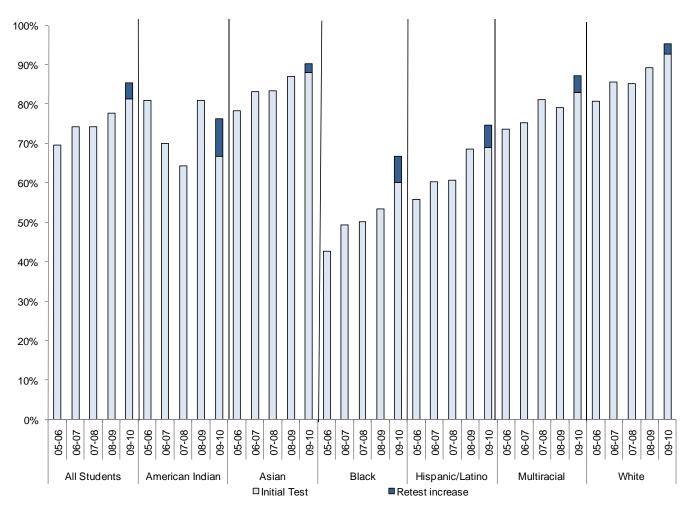


Table A5
Ethnicity Proficiency Rates—U.S. History 2005-06 to 2009-10

	05-06	06-07	07-08	08-09		09-10	
U.S. History					Initial	Retest	With
		Initial	Test		Test	Increase	Retests
All Students	69.6%	74.2%	74.1%	77.6%	81.3%	4.1%	85.4%
American Indian	80.8%	70.0%	64.3%	80.8%	66.7%	9.5%	76.2%
Asian	78.2%	83.2%	83.3%	86.9%	88.0%	2.2%	90.2%
Black/African American	42.7%	49.3%	50.2%	53.4%	60.0%	6.8%	66.8%
Hispanic/Latino	55.8%	60.3%	60.6%	68.6%	68.9%	5.8%	74.7%
Multiracial	73.5%	75.3%	81.0%	79.0%	83.0%	4.1%	87.1%
White	80.6%	85.5%	85.2%	89.1%	92.6%	2.6%	95.2%

Figure A6
Ethnicity Proficiency Rates—Algebra II 2006-07 to 2009-10

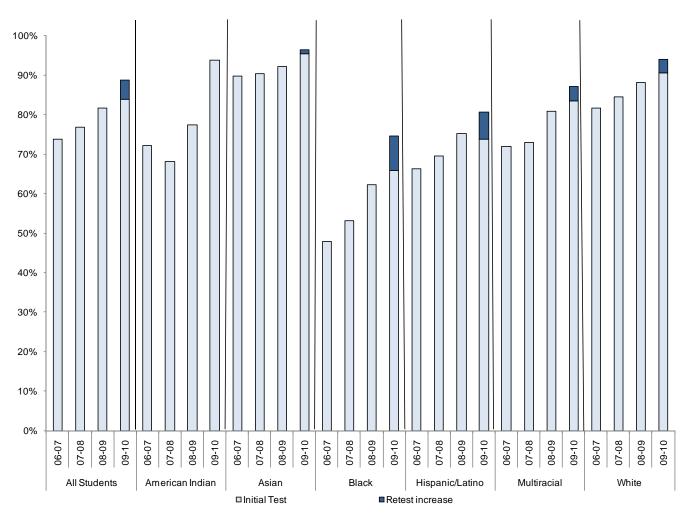


Table A6
Ethnicity Proficiency Rates—Algebra II 2006-07 to 2009-10

	06-07	07-08	08-09		09-10	
Algebra II				Initial	Retest	With
	Ini	tial Tes		Test	Increase	Retests
All Students	73.8%	76.9%	81.6%	83.9%	4.8%	88.7%
American Indian	72.2%	68.2%	77.4%	93.8%	0.0%	93.8%
Asian	89.7%	90.3%	92.2%	95.4%	1.1%	96.5%
Black/African American	47.9%	53.1%	62.3%	65.9%	8.8%	74.7%
Hispanic/Latino	66.3%	69.5%	75.2%	73.8%	6.9%	80.7%
Multiracial	72.0%	84.6%	88.1%	90.6%	3.5%	94.1%
White	81.6%	90.2%	91.0%	92.7%	2.7%	95.4%

Figure A7
Ethnicity Proficiency Rates—Geometry 2006-07 to 2009-10

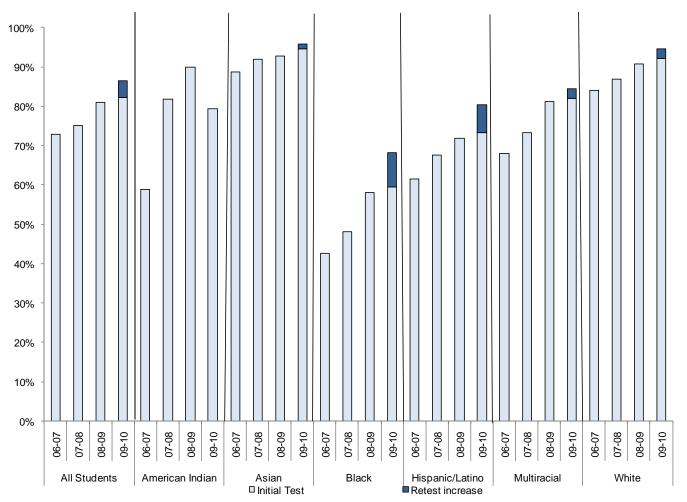


Table A7
Ethnicity Proficiency Rates—Geometry 2006-07 to 2009-10

	06-07	07-08	08-09		09-10	
Geometry				Initial	Retest	With
	Ini	tial Tes	st	Test	Increase	Retests
All Students	72.8%	75.1%	81.0%	82.2%	4.3%	86.5%
American Indian	58.8%	81.8%	90.0%	79.3%	0.0%	79.3%
Asian	88.8%	92.0%	92.7%	94.6%	1.2%	95.8%
Black/African American	42.6%	48.1%	58.1%	59.5%	8.8%	68.3%
Hispanic/Latino	61.6%	67.6%	71.8%	73.4%	7.0%	80.4%
Multiracial	68.1%	73.3%	81.3%	82.1%	2.4%	84.5%
White	84.0%	87.0%	90.7%	92.1%	2.5%	94.6%

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 07-08 08-09 09-10 07-08 08-09 09-10 07-08 08-09 09-10 07-08 08-09 09-10 07-08 08-09 09-10 07-08 08-09 09-10 07-08 08-09 09-10 07-08 08-09 09-10 07-08 08-09 09-10 All Students Multiracial White

Figure A8 **Ethnicity Proficiency Rates—Physical Science 2007-08 to 2009-10** 

**Table A8** Ethnicity Proficiency Rates—Physical Science 2007-08 to 2009-10

Black

7.4%

Hispanic/Latino

7.7%

80.3% 44.3% 53.7% 64.5% 56.8% 65.6% 70.9% 66.7% 73.8% 80.3% 75.7% 82.7% 89.0%

3.3%

Asian

4.2%

	07-08	08-09		09-10	
Physical Science			Initial	Retest	With
	Initial	Test	Test	Increase	Retests
All Students	60.1%	67.2%	75.4%	5.8%	81.2%
American Indian	75.0%	57.1%	91.7%	0.0%	91.7%
Asian	66.1%	68.1%	80.3%	4.2%	84.5%
Black/African American	44.3%	53.7%	64.5%	7.4%	71.9%
Hispanic/Latino	56.8%	65.6%	70.9%	7.7%	78.6%
Multiracial	66.7%	73.8%	80.3%	8.7%	89.0%
White	75.7%	82.7%	89.0%	3.3%	92.3%

29

American Indian

60.1% 67.2% 75.4% 75.0% 57.1% 91.7% 66.1% 68.1%

5.8%

0.0%

■Retest increase

□Initial Test

# **APPENDIX B**

Figure B1
Ethnicity Scale Scores—Algebra I 2006-07 to 2009-10

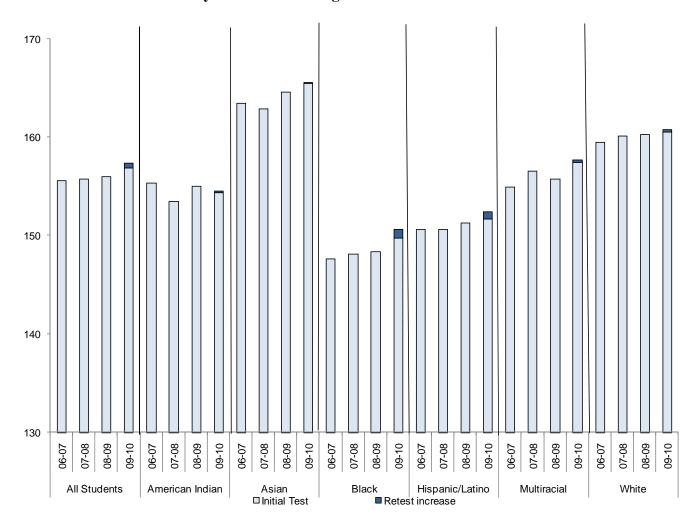


Table B1 Ethnicity Scale Scores—Algebra I 2006-07 to 2009-10

	06-07	07-08	08-09		09-10	
Algebra I	In	itial Te	est	Initial Test	Retest Increase	With Retests
All Students	155.5	155.7	155.9	156.8	0.5	157.3
American Indian	155.3	153.4	155.0	154.3	0.2	154.5
Asian	163.4	162.8	164.5	165.4	0.1	165.5
Black/African American	147.6	148.1	148.3	149.7	0.9	150.6
Hispanic/Latino	150.6	150.6	151.2	151.6	0.8	152.4
Multiracial	154.9	156.5	155.7	157.4	0.2	157.6
White	159.4	160.1	160.2	160.5	0.2	160.7

Figure B2
Ethnicity Scale Scores—Biology 2007-08 to 2009-10

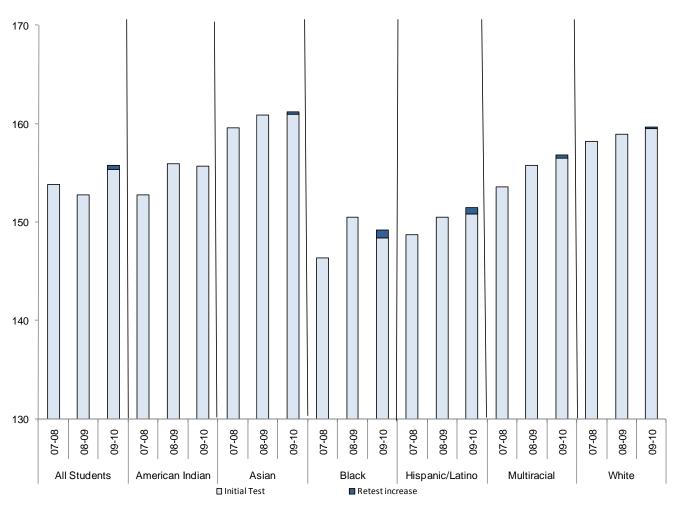


Table B2 Ethnicity Scale Scores—Biology 2007-08 to 2009-10

	07-08	08-09		09-10	
Biology	Initia	l Test	Initial Test	Retest Increase	With Retests
All Students	153.8	155.2	155.4	0.4	155.8
American Indian	152.8	155.9	155.7	0.0	155.7
Asian	159.6	160.9	161.0	0.2	161.2
Black/African American	146.4	150.5	148.4	0.8	149.2
Hispanic/Latino	148.7	150.5	150.8	0.7	151.5
Multiracial	153.6	155.8	156.5	0.3	156.8
White	158.2	158.9	159.5	0.2	159.7

Figure B3
Ethnicity Scale Scores—Civics & Economics 2005-06 to 2009-10

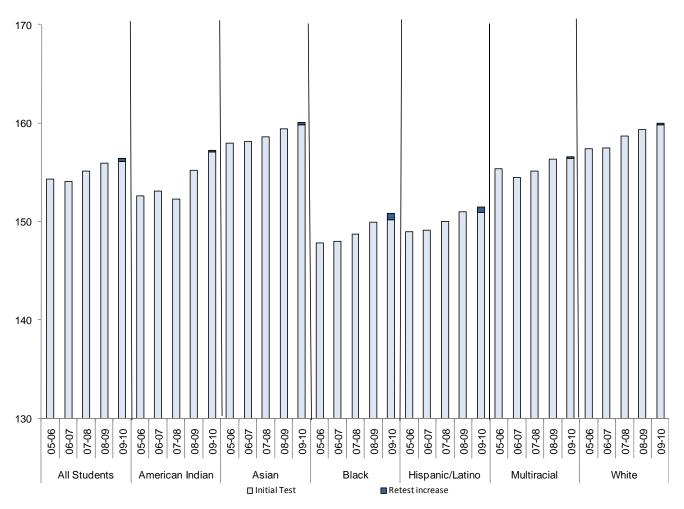


Table B3
Ethnicity Scale Scores—Civics & Economics 2005-06 to 2009-10

	05-06	06-07	07-08	08-09	09-10		
Civics & Economics					Initial	Retest	With
		Init	ial Test	t	Test	Increase	Retests
All Students	154.3	154.1	155.1	155.9	156.1	0.3	156.4
American Indian	152.6	153.1	152.3	155.2	157.1	0.1	157.2
Asian	158.0	158.1	158.6	159.4	159.8	0.3	160.1
Black/African American	147.8	148.0	148.7	149.9	150.2	0.6	150.8
Hispanic/Latino	149.0	149.1	150.0	151.0	150.9	0.6	151.5
Multiracial	155.4	154.5	155.1	156.3	156.4	0.2	156.6
White	157.4	157.5	158.7	159.3	159.8	0.2	160.0

All Students

170 160 150 140 130 09-10 09-10 08-09 08-09 09-10 07-08 60-80 09-10 07-08 60-80 20-90 07-08 60-80 07-08 60-80 09-10 07-08 60-80 09-10 07-08 60-80 09-10 20-90 20-90 20-90 20-90 20-90 20-90

Black

Hispanic/Latino

Multiracial

White

Figure B4
Ethnicity Scale Scores—English I 2006-07 to 2009-10

Table B4
Ethnicity Scale Scores—English I 2006-07 to 2009-10

☐ Initial Test ☐ Retest increase

Asian

	06-07 07-08 08-09 09-10					
English I	In	nitial To	est	Initial Test	Retest Increase	With Retests
All Students	152.8	153.3	153.7	153.8	0.4	154.2
American Indian	155.0	153.8	153.9	151.0	0.6	151.6
Asian	156.6	157.2	157.5	157.6	0.2	157.8
Black/African American	146.8	147.6	148.3	148.4	0.7	149.1
Hispanic/Latino	146.8	147.0	147.7	147.9	0.6	148.5
Multiracial	153.3	153.6	154.5	154.4	0.4	154.8
White	156.8	157.4	157.7	157.7	0.1	157.8

33

American Indian

Figure B5
Ethnicity Scale Scores—U.S. History 2005-06 to 2009-10

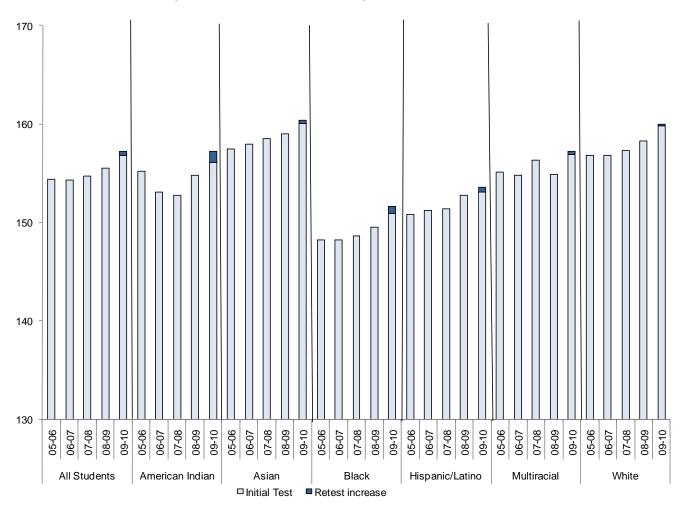


Table B5
Ethnicity Scale Scores—U.S. History 2005-06 to 2009-10

	05-06	06-07	07-08	08-09	09-10			
U.S. History					Initial	Retest	With	
		Init	ial Test	Ė	Test	Increase	Retests	
All Students	154.4	154.3	154.7	155.5	156.8	0.4	157.2	
American Indian	155.2	153.1	152.8	154.8	156.1	1.1	157.2	
Asian	157.5	158.0	158.5	159.0	160.1	0.3	160.4	
Black/African American	148.2	148.2	148.6	149.5	150.9	0.7	151.6	
Hispanic/Latino	150.8	151.2	151.4	152.8	153.1	0.5	153.6	
Multiracial	155.1	154.8	156.3	154.9	156.9	0.3	157.2	
White	156.8	156.8	157.3	158.3	159.8	0.2	160.0	

Figure B6
Ethnicity Scale Scores—Algebra II 2006-07 to 2009-10

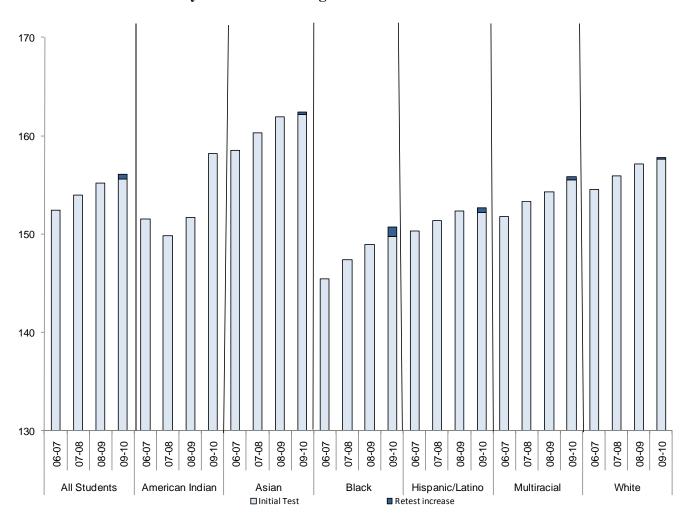


Table B6 Ethnicity Scale Scores—Algebra II 2006-07 to 2009-10

	06-07	07-08	08-09	09-10			
Algebra II				Initial	Retest	With	
	In	itial To	est	Test	Increase	Retests	
All Students	152.4	154.0	155.2	155.6	0.5	156.1	
American Indian	151.5	149.8	151.7	158.2	0.0	158.2	
Asian	158.5	160.3	161.9	162.2	0.2	162.4	
Black/African American	145.4	147.4	148.9	149.7	1.0	150.7	
Hispanic/Latino	150.3	151.4	152.3	152.2	0.5	152.7	
Multiracial	151.8	153.3	154.3	155.5	0.3	155.8	
White	154.5	155.9	157.1	157.6	0.2	157.8	

Figure B7
Ethnicity Scale Scores—Geometry 2006-07 to 2009-10

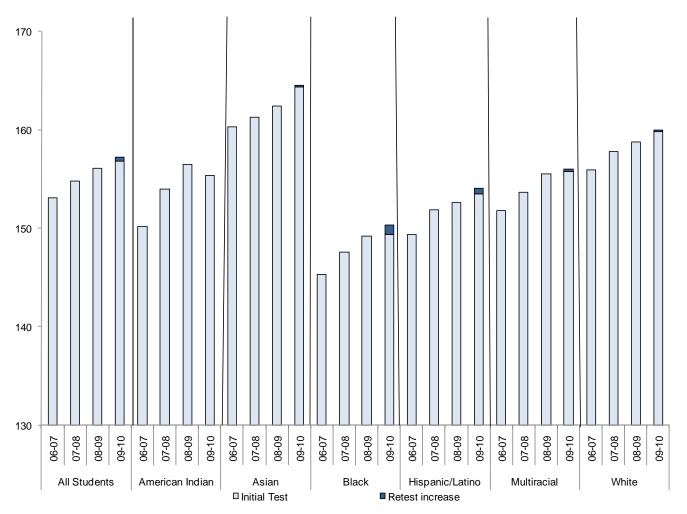


Table B7
Ethnicity Scale Scores—Geometry 2006-07 to 2009-10

	06-07 07-08 08-09		09-10			
Geometry	Initial Test			Initial Test	Retest Increase	With Retests
All Students	153.1	154.8	156.1	156.8	0.4	157.2
American Indian	150.2	154.0	156.5	155.4	0.0	155.4
Asian	160.3	161.3	162.4	164.4	0.1	164.5
Black/African American	145.3	147.6	149.2	149.4	0.9	150.3
Hispanic/Latino	149.4	151.9	152.6	153.5	0.6	154.1
Multiracial	151.8	153.7	155.5	155.8	0.2	156.0
White	155.9	157.8	158.8	159.8	0.2	160.0

Figure B8
Ethnicity Scale Scores—Physical Science 2007-08 to 2009-10

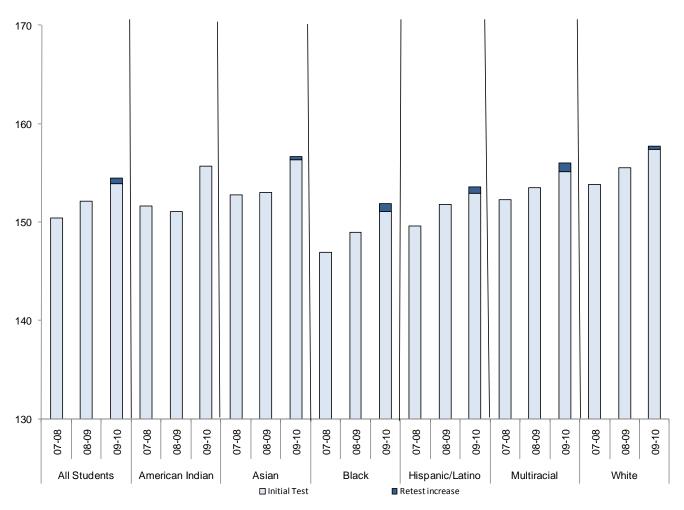


Table B8
Ethnicity Scale Scores—Physical Science 2007-08 to 2009-10

	07-08	08-09	09-10			
Physical Science			Initial	Retest	With	
	Initia	l Test	Test	Increase	Retests	
All Students	150.4	152.1	153.9	0.6	154.5	
American Indian	151.6	151.1	155.7	0.0	155.7	
Asian	152.8	153.0	156.3	0.4	156.7	
Black/African American	146.9	149.0	151.1	0.8	151.9	
Hispanic/Latino	149.6	151.8	152.9	0.7	153.6	
Multiracial	152.3	153.5	155.1	0.9	156.0	
White	153.8	155.5	157.4	0.3	157.7	

### **APPENDIX C**

Figure C1 SWD Proficiency Rates -- 2005-06 to 2009-10

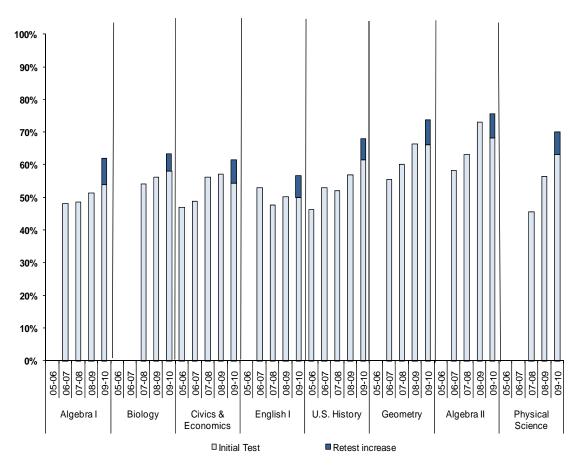


Table C1 SWD Proficiency Rates -- 2005-06 to 2009-10

	05-06	05-06 06-07 07-08 08-09 09-10						09-10	
SWD								All Students	
3415					Initial	Retest	With	with	
		Initia	l Test		Test	Increase	Retests	retest	Difference
Core									
Algebra I	*	48.1%	48.6%	51.3%	53.9%	8.0%	61.9%	84.9%	23.0%
Biology	*	*	54.3%	56.2%	58.1%	5.4%	63.5%	84.2%	20.7%
Civics and Economics	47.1%	48.8%	56.3%	57.2%	54.4%	7.1%	61.5%	84.0%	22.5%
English I		53.0%	47.8%	50.2%	50.1%	6.6%	56.7%	85.4%	28.7%
U.S. History	46.2%	53.1%	52.1%	56.9%	61.5%	6.5%	68.0%	85.4%	17.4%
Elective									
Geometry	*	55.6%	60.2%	66.3%	66.2%	7.5%	73.7%	86.5%	12.8%
Algebra II	*	58.2%	63.1%	73.0%	68.3%	7.3%	75.6%	88.7%	13.1%
Physical Science	*	*	45.6%	56.4%	63.1%	6.9%	70.0%	81.2%	11.2%

<sup>\*</sup> Scale scores are not shown where the scales changed when new tests were introduced.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 07-08 08-09 09-10 07-08 08-09 09-10 06-07 07-08 08-09 07-08 08-09 09-10 02-06 07-08 05-06 08-09 07-08 05-06 05-06 06-07 20-90 20-90 02-06 20-90 20-90 07-08 Algebra I Biology Civics & English I U.S. History Algebra II Physical Geometry **Economics** Science

Figure C2 LEP Proficiency Rates -- 2005-06 to 2009-10

■ Retest increase

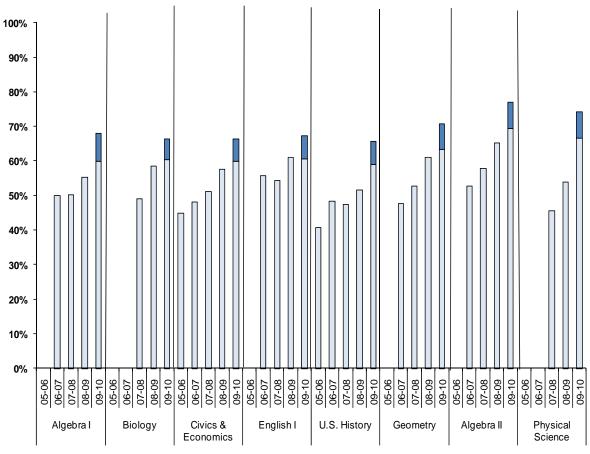
□ Initial Test

Table C2 LEP Proficiency Rates -- 2005-06 to 2009-10

	05-06	06-07	07-08	08-09		09-10		09	9-10
								All	
LEP								Students	
					Initial	Retest	With	with	
		Initia	l Test		Test	Increase	Retests	retest	Difference
Core									
Algebra I	*	47.2%	47.9%	54.5%	47.9%	7.4%	55.3%	84.9%	29.6%
Biology	*	*	46.5%	58.3%	43.7%	5.7%	49.4%	84.2%	34.8%
Civics and Economics	29.0%	37.6%	41.8%	48.2%	38.1%	7.0%	45.1%	84.0%	38.9%
English I		35.4%	37.4%	43.8%	37.8%	5.5%	43.3%	85.4%	42.1%
U.S. History	29.1%	30.3%	44.2%	53.5%	43.4%	5.7%	49.1%	85.4%	36.3%
Elective									
Geometry	*	52.6%	64.2%	70.7%	64.5%	6.0%	70.5%	86.5%	16.0%
Algebra II	*	63.5%	66.9%	71.8%	71.9%	5.2%	77.1%	88.7%	11.6%
Physical Science	*	*	45.0%	58.6%	54.9%	9.3%	64.2%	81.2%	17.0%

<sup>\*</sup> Scale scores are not shown where the scales changed when new tests were introduced.

Figure C3 FRL Proficiency Rates -- 2005-06 to 2009-10



■ Retest increase

Table C3
FRL Proficiency Rates -- 2005-06 to 2009-10

□ Initial Test

	05-06	06-07	07-08	08-09		09-10		09	9-10
								All	
FRL								Students	
					Initial	Retest	With	with	
		Initia	l Test		Test	Increase	Retests	retest	Difference
Core									
Algebra I	*	50.1%	50.3%	55.2%	60.0%	7.9%	67.9%	84.9%	17.0%
Biology	*	*	49.0%	58.5%	60.3%	6.1%	66.4%	84.2%	17.8%
Civics and Economics	44.9%	48.1%	51.1%	57.7%	59.9%	6.5%	66.4%	84.0%	17.6%
English I		55.8%	54.4%	61.0%	60.7%	6.7%	67.4%	85.4%	18.0%
U.S. History	40.8%	48.4%	47.5%	51.7%	59.0%	6.8%	65.8%	85.4%	19.6%
Elective									
Geometry	*	47.7%	52.8%	61.1%	63.5%	7.2%	70.7%	86.5%	15.8%
Algebra II	*	52.8%	57.9%	65.2%	69.5%	7.6%	77.1%	88.7%	11.6%
Physical Science	*	*	45.6%	54.0%	66.6%	7.6%	74.2%	81.2%	7.0%

<sup>\*</sup> Scale scores are not shown where the scales changed when new tests were introduced.

## APPENDIX D

Figure D1 SWD Scale Score Averages -- 2005-06 to 2009-10

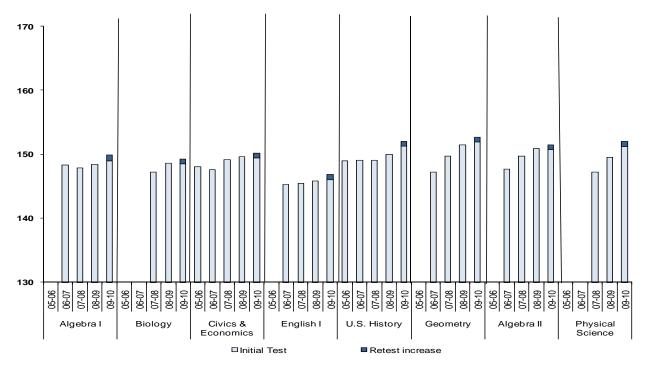


Table D1 SWD Scale Score Averages -- 2005-06 to 2009-10

	05-06	06-07	07-08	08-09		09-10		09	-10
								All	
SWD								Students	
					Initial	Retest	With	with	
		Initia	l Test		Test	Increase	Retests	retest	Difference
Core									
Algebra I	*	148.3	147.9	148.4	149.0	0.9	149.9	157.3	7.4
Biology	*	*	147.2	148.6	148.5	0.8	149.3	155.8	6.5
Civics and Economics	148.1	147.6	149.2	149.6	149.4	0.8	150.2	156.4	6.2
English I		145.3	145.5	145.8	146.0	0.9	146.9	154.2	7.3
U.S. History	149.0	149.1	149.1	150.0	151.3	0.7	152.0	157.2	5.2
Elective									
Geometry	*	147.2	149.7	151.5	151.9	0.7	152.6	157.2	4.6
Algebra II	*	147.7	149.7	150.9	150.7	0.8	151.5	156.1	4.6
Physical Science	*	*	147.2	149.5	151.2	0.8	152.0	154.5	2.5

<sup>\*</sup> Scale scores are not shown where the scales changed when new tests were introduced.

Figure D2 LEP Scale Score Averages -- 2005-06 to 2009-10

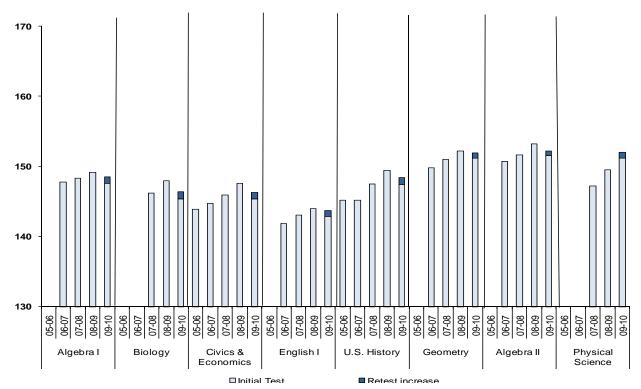


Table D2 LEP Scale Score Averages -- 2005-06 to 2009-10

	05-06	06-07	06-07 07-08 08-09 09-10					09-10		
								All		
LEP								Students		
					Initial	Retest	With	with		
		Initia	l Test		Test	Increase	Retests	retest	Difference	
Core										
Algebra I	*	147.8	148.3	149.2	147.6	0.9	148.5	157.3	8.8	
Biology	*	*	146.2	148.0	145.4	1.0	146.4	155.8	9.4	
Civics and Economics	143.9	144.7	145.9	147.6	145.4	0.9	146.3	156.4	10.1	
English I		141.9	143.1	144.0	142.9	0.8	143.7	154.2	10.5	
U.S. History	145.2	145.2	147.5	149.4	147.4	1.0	148.4	157.2	8.8	
Elective										
Geometry	*	149.8	151.0	152.2	151.2	0.7	151.9	157.2	5.3	
Algebra II	*	150.7	151.7	153.2	151.6	0.6	152.2	156.1	3.9	
Physical Science	*	*	147.2	149.5	151.2	0.8	152.0	154.5	2.5	

<sup>\*</sup> Scale scores are not shown where the scales changed when new tests were introduced.

150 - 150 - 140 - 130 - 150 -

Figure D3
FRL Scale Score Averages -- 2005-06 to 2009-10

Table D3
FRL Scale Score Averages -- 2005-06 to 2009-10

	05-06	06-07	07-08	08-09		09-10		09	-10
								All	
FRL								Students	
					Initial	Retest	With	with	
		Initia	l Test		Test	Increase	Retests	retest	Difference
Core									
Algebra I	*	148.2	148.4	149.1	150.3	0.9	151.2	157.3	6.1
Biology	*	*	146.3	148.6	149.1	0.7	149.8	155.8	6.0
Civics and Economics	147.4	147.1	148.0	149.6	149.9	0.7	150.6	156.4	5.8
English I		146.1	146.5	147.6	142.9	0.7	143.6	154.2	10.6
U.S. History	147.7	148.3	148.2	149.2	150.9	0.7	151.6	157.2	5.6
Elective									
Geometry	*	146.7	148.5	150.0	150.9	0.7	151.6	157.2	5.6
Algebra II	*	147.2	148.6	149.7	150.9	0.8	151.7	156.1	4.4
Physical Science	*	*	147.3	149.3	151.8	0.9	152.7	154.5	1.8

<sup>\*</sup> Scale scores are not shown where the scales changed when new tests were introduced.

### **APPENDIX E**

Figure E1
Gender and Ethnicity Proficiency Scores—Algebra I 2008-09 to 2009-10

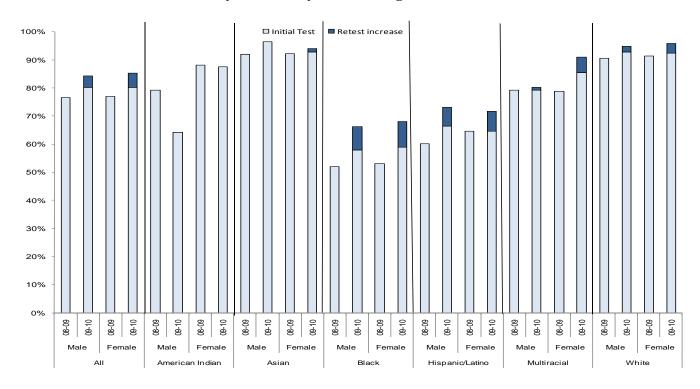


Table E1
Gender and Ethnicity Proficiency Scores—Algebra I 2008-09 to 2009-10

		08-09		09-10	
Algebra I		Initia	Initial Test		With Retests
All Students	Male	76.5%	80.3%	4.0%	84.3%
	Female	76.9%	80.2%	5.2%	85.4%
American Indian	Male	79.2%	64.3%	0.0%	64.3%
American indian	Female	88.2%	87.5%	0.0%	87.5%
Asian	Male	92.0%	96.5%	0.0%	96.5%
Asian	Female	92.1%	92.8%	1.2%	94.0%
Black/African American	Male	52.0%	57.9%	8.3%	66.2%
Black/timean/timenean	Female	53.0%	59.0%	9.1%	68.1%
Hispanic/Latino	Male	60.1%	66.5%	6.7%	73.2%
1 113 partito/ Latino	Female	64.7%	64.6%	7.1%	71.7%
Multiracial	Male	79.3%	79.2%	1.1%	80.3%
Waltifaolai	Female	78.9%	85.5%	5.5%	91.0%
White	Male	90.6%	92.9%	1.9%	94.8%
VVIIICO	Female	91.4%	92.4%	3.5%	95.9%

Figure E2
Gender and Ethnicity Proficiency Scores—Biology 2008-09 to 2009-10

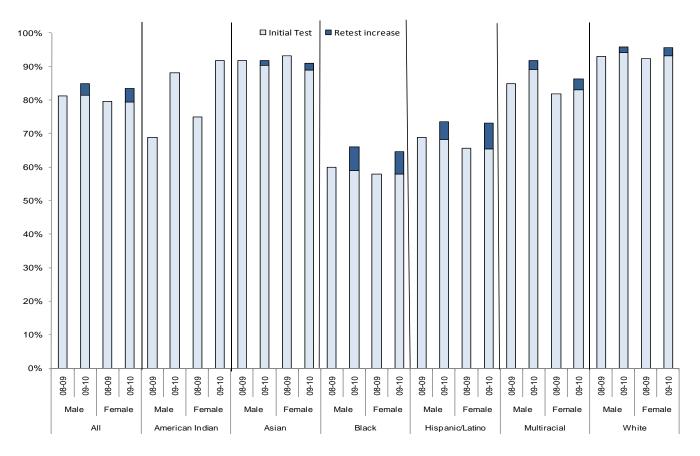


Table E2
Gender and Ethnicity Proficiency Scores—Biology 2008-09 to 2009-10

		08-09		09-10	
Biology		Initia	l Test	Retest Increase	With Retests
All Students	Male	81.3%	81.4%	3.5%	84.9%
All Students	Female	79.6%	79.4%	4.1%	83.5%
American Indian	Male	68.8%	88.2%	0.0%	88.2%
	Female	75.0%	91.7%	0.0%	91.7%
Asian	Male	91.7%	90.3%	1.4%	91.7%
Asian	Female	93.2%	88.9%	2.1%	91.0%
Black/African American	Male	60.0%	58.9%	7.1%	66.0%
Diack/Ailican Ailiencan	Female	58.0%	58.0%	6.6%	64.6%
Hispanic/Latino	Male	68.8%	68.2%	5.4%	73.6%
i iispanic/Latino	Female	65.7%	65.5%	7.6%	73.1%
Multiracial	Male	84.8%	89.1%	2.7%	91.8%
Iviuitiiaciai	Female	81.8%	83.1%	3.2%	86.3%
White	Male	93.1%	94.2%	1.6%	95.8%
VVIIIC	Female	92.3%	93.3%	2.4%	95.7%

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Figure E3
Gender and Ethnicity Proficiency Scores—Civics & Economics 2008-09 to 2009-10

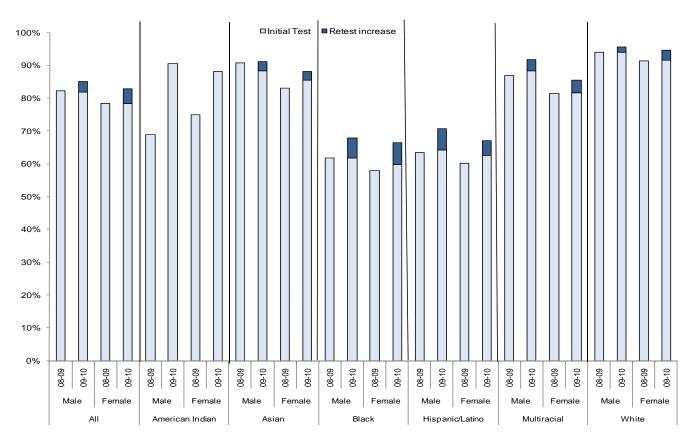


Table E3
Gender and Ethnicity Proficiency Scores—Civics & Economics 2008-09 to 2009-10

		08-09		09-10	
Civics and Economics		Initia	l Test	Retest Increase	With Retests
All Students	Male	82.3%	81.8%	3.4%	85.2%
All Students	Female	78.5%	78.5%	4.3%	82.8%
American Indian	Male	68.8%	90.5%	0.0%	90.5%
American indian	Female	75.0%	88.2%	0.0%	88.2%
Asian	Male	90.7%	88.3%	2.8%	91.1%
Asian	Female	83.0%	85.6%	2.6%	88.2%
Black/African American	Male	61.8%	61.8%	6.0%	67.8%
Diack/Ailican American	Female	58.0%	59.8%	6.7%	66.5%
Hispanic/Latino	Male	63.4%	64.2%	6.6%	70.8%
i iispariic/Latirio	Female	60.2%	62.7%	4.3%	67.0%
Multiracial	Male	86.9%	88.3%	3.5%	91.8%
IVIUILIIaciai	Female	81.4%	81.7%	3.9%	85.6%
White	Male	94.1%	94.0%	1.7%	95.7%
VVIIICO	Female	91.3%	91.6%	3.1%	94.7%

Figure E4
Gender and Ethnicity Proficiency Scores—English I 2008-09 to 2009-10

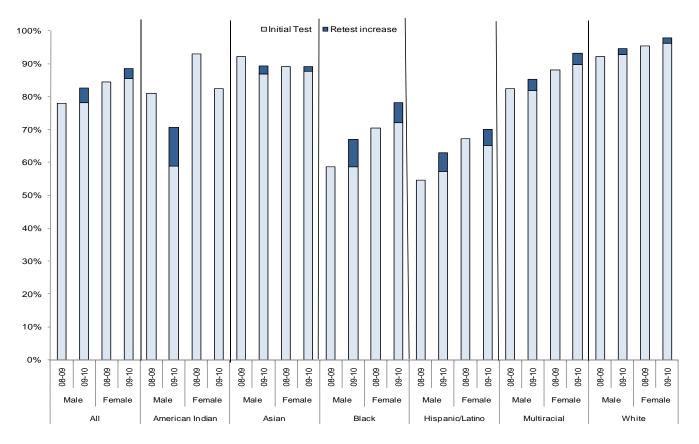


Table E4
Gender and Ethnicity Proficiency Scores—English I 2008-09 to 2009-10

		08-09		09-10	
English I				Retest	With
			I Test	Increase	Retests
All Students	Male	78.0%	78.2%	4.4%	82.6%
All Otadonts	Female	84.5%	85.4%	3.2%	88.6%
American Indian	Male	81.0%	58.8%	11.8%	70.6%
Amencan indian	Female	92.9%	82.4%	0.0%	82.4%
Asian	Male	92.1%	86.9%	2.5%	89.4%
Asian	Female	89.2%	87.8%	1.4%	89.2%
Black/African American	Male	58.6%	58.7%	8.4%	67.1%
Diack/Ailican American	Female	70.4%	72.1%	6.0%	78.1%
Hispanic/Latino	Male	54.7%	57.2%	5.7%	62.9%
i iispariio/Latirio	Female	67.3%	65.1%	5.0%	70.1%
Multiracial	Male	82.4%	81.8%	3.5%	85.3%
Martinaciai	Female	88.1%	89.7%	3.4%	93.1%
White	Male	92.1%	92.7%	1.9%	94.6%
VVIIICO	Female	95.5%	96.3%	1.5%	97.8%

Figure E5
Gender and Ethnicity Proficiency Scores—U.S. History 2008-09 to 2009-10

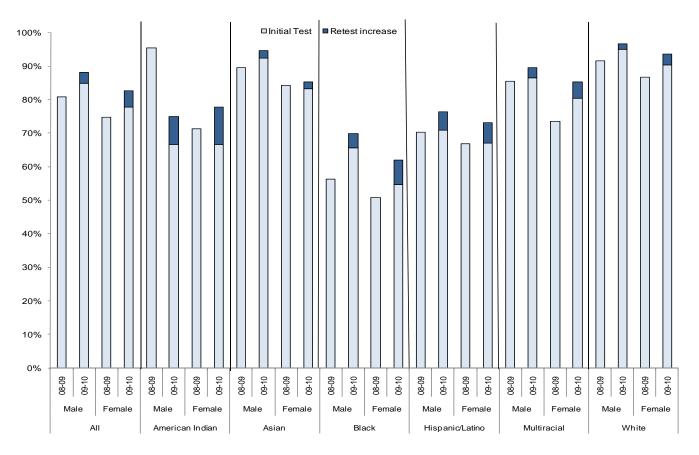


Table E5
Gender and Ethnicity Proficiency Scores—U.S. History 2008-09 to 2009-10

		08-09		09-10	
U.S. History		Initia	l Test	Retest Increase	With Retests
All Students	Male	80.8%	84.9%	3.3%	88.2%
All Students	Female	74.7%	77.9%	4.7%	82.6%
American Indian	Male	95.5%	66.7%	8.3%	75.0%
	Female	71.4%	66.7%	11.1%	77.8%
Asian	Male	89.5%	92.3%	2.3%	94.6%
Asian	Female	84.3%	83.2%	2.1%	85.3%
Black/African American	Male	56.4%	65.7%	4.3%	70.0%
Diack/Ailican Ailiencan	Female	50.8%	54.7%	7.3%	62.0%
Hispanic/Latino	Male	70.4%	70.9%	5.4%	76.3%
i iispanic/Latino	Female	66.9%	67.1%	6.1%	73.2%
Multiracial	Male	85.6%	86.5%	3.0%	89.5%
Iviuitiiaciai	Female	73.6%	80.4%	4.9%	85.3%
White	Male	91.5%	95.0%	1.7%	96.7%
I VVIIIC	Female	86.7%	90.3%	3.4%	93.7%

# APPENDIX F

Figure F1 WCPSS 2009-10 Middle School and High School Algebra I

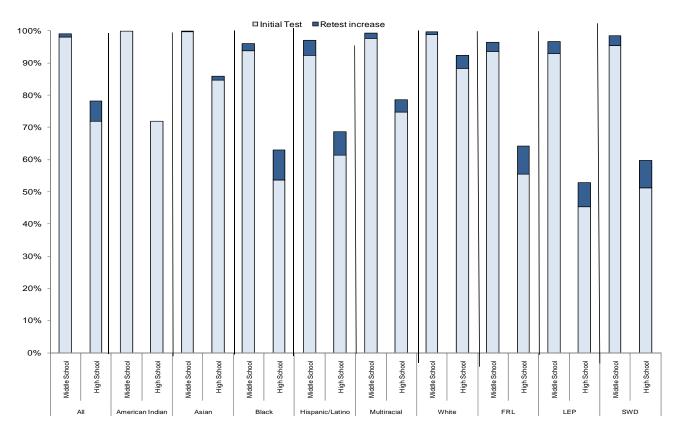


Table F1 WCPSS 2009-10 Middle School and High School Algebra I

Algebra I		Initial	Retest	With	
<b>G</b>		Test	Increase	Retests	
All Students	Middle School	98.1%	1.0%	99.1%	
Air Students	High School	71.9%	6.3%	78.2%	
American	Middle School	100.0%	0.0%	100.0%	
Indian	High School	72.0%	0.0%	72.0%	
Asian	Middle School	99.8%	0.2%	100.0%	
Asian	High School	84.6%	1.4%	86.0%	
Black/African	Middle School	93.8%	2.3%	96.1%	
American	High School	53.6%	9.5%	63.1%	
Hispanic/	Middle School	92.5%	4.5%	97.0%	
Latino	High School	61.4%	7.2%	68.6%	
Multiracial	Middle School	97.7%	1.5%	99.2%	
	High School	74.8%	3.9%	78.7%	
White	Middle School	98.8%	0.8%	99.6%	
vviiite	High School	88.4%	4.0%	92.4%	
FRL	Middle School	93.6%	2.9%	96.5%	
I IXL	High School	55.6%	8.6%	64.2%	
LEP	Middle School	93.1%	3.5%	96.6%	
	High School	45.3%	7.6%	52.9%	
SWD	Middle School	95.5%	3.0%	98.5%	
OVVD	High School	51.3%	8.4%	59.7%	

Table F2 WCPSS 2009-10 Middle School and High School Algebra I Initial Tests

	Initial tests										
	Middle School					High School					
		% of		Scale		% of		Scale			
		total	%	Score		total		Score			
Subgroup	#	tests	proficient	Average	#	tests	% proficient	Average			
American Indian	5	0.2%	100.0%	165.8	25	0.3%	72.0%	152.3			
Asian	428	12.9%	99.8%	169.7	221	3.1%	84.6%	157.2			
Black/African American	355	10.7%	93.8%	159.3	2,578	36.1%	53.6%	149.4			
Hispanic/Latino	134	4.0%	92.5%	161.9	854	12.0%	61.4%	150.9			
Multiracial	131	3.9%	97.7%	164.7	254	3.6%	74.8%	154.0			
White	2,264	68.3%	98.8%	165.3	3,213	45.0%	88.4%	157.5			
FRL	344	10.4%	93.6%	160.5	2,619	36.7%	55.6%	149.0			
LEP	29	0.9%	93.1%	161.3	510	7.1%	45.3%	146.8			
SWD	67	2.0%	95.5%	162.3	1,082	15.1%	51.3%	148.2			
All Students	3,317	100.0%	98.1%	165.0	7,145	100.0%	71.9%	153.0			

Table F3 WCPSS 2009-10 Middle School and High School Algebra I Retests

	Retests									
		Mid	dle Schoo		High School					
		% of		Scale		% of		Scale		
		total	%	Score		total		Score		
Subgroup	#	tests	proficient	Average	#	tests	% proficient	Average		
American Indian	0	0.0%			6	0.4%	0.0%	141.3		
Asian	1	1.8%	100.0%	155.0	25	1.6%	12.0%	142.0		
Black/African American	18	32.7%	44.4%	147.7	906	59.3%	27.1%	143.8		
Hispanic/Latino	8	14.5%	75.0%	151.6	250	16.4%	24.8%	143.8		
Multiracial	3	5.5%	66.7%	146.3	42	2.8%	23.8%	143.9		
White	25	45.5%	68.0%	149.1	298	19.5%	43.3%	146.3		
FRL	18	32.7%	55.6%	148.6	863	56.5%	26.2%	143.7		
LEP	2	3.6%	50.0%	147.0	214	14.0%	18.2%	142.5		
SWD	2	3.6%	100.0%	152.0	365	23.9%	24.9%	143.5		
All Students	55	100.0%	61.8%	148.9	1,527	100.0%	29.5%	144.3		

### APPENDIX G

Figure G1
WCPSS 2009-10 Performances on Core Courses Compared to Other Districts

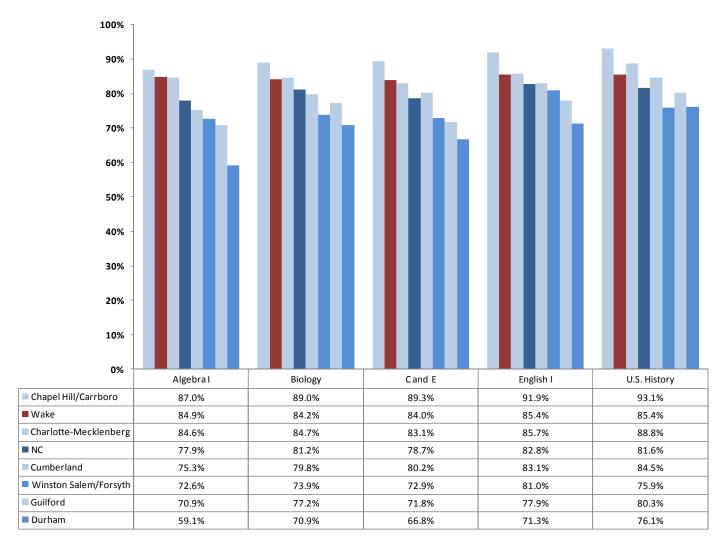


Table G1
WCPSS 2009-10 Subgroup Performances on Core Courses Compared to Other Districts

District	Male	Female	Amer Ind	Asian	Black	Hispanic	Multiracial	White	FRL	LEP	SWD	All Students
Chapel Hill/Carrboro	89.9%	90.0%	>95%	87.2%	68.1%	75.4%	>95%	>95%	66.5%	56.8%	59.9%	90.0%
Wake	85.4%	85.1%	83.3%	92.4%	68.8%	73.1%	87.5%	>95%	68.7%	52.7%	64.2%	85.3%
Charlotte-Mecklenberg	84.2%	84.6%	81.6%	89.6%	77.1%	80.3%	88.2%	94.5%	77.2%	67.0%	58.1%	84.4%
NC	80.2%	81.4%	71.6%	88.0%	67.0%	74.2%	83.3%	88.6%	70.9%	55.7%	52.5%	80.8%
Cumberland	79.5%	81.7%	81.1%	91.4%	73.3%	82.3%	85.9%	89.3%	73.3%	53.1%	46.6%	80.6%
Winston Salem/Forsyth	74.5%	74.3%	66.2%	89.8%	58.1%	66.7%	81.1%	88.6%	59.5%	48.2%	43.7%	74.4%
Guilford	72.6%	75.7%	76.2%	77.6%	62.0%	69.2%	76.6%	88.4%	62.1%	51.0%	45.0%	74.2%
Durham	65.7%	68.4%	83.3%	87.3%	58.3%	58.5%	79.1%	90.0%	54.3%	44.0%	39.3%	67.0%