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WAKE COUNTY
PUBLIC SCHOOL SYSTEM

WAKE COUNTY PUBLIC SCHOOLS (WCPSS) HIGH SCHOOL STUDENT OUTCOMES: 2006-07

Editor
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ABSTRACT

Many indicators of performance, persistence, and academic rigor for WCPSS high school students point toward the relative success of WCPSS high school students. Student achievement remains high compared to state and national results, and an increasing number of students are pursuing rigorous AP coursework in high school. The skills and abilities that WCPSS graduates obtain appear to serve them well in the University of North Carolina (UNC) system, which is the most common educational destination for WCPSS graduates. However, changing student populations and rising academic standards are challenging the system's ability to sustain and increase academic performance for all students. Gaps in achievement have increased, with higher percentages of minority students and students with academic risk factors at risk of not graduating on time, compared to other groups.

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WCPSS HIGH SCHOOL STUDENT OUTCOMES: 2006-07

SUMMARY

This report summarizes overall trends in student outcomes at grades 9-12 for 2006-07 and over time for the Wake County Public School System (WCPSS). This includes not only a variety of testing results but also accountability standards, promotion/retention rates, and graduation rates. Findings related to effective practices based on our research and evaluations are included in the final section, followed by a discussion of the overall results and issues to watch in the coming years.

BACKGROUND

Demographic Trends

The WCPSS student population has been growing rapidly, with an increase of 31% since 2001. High school enrollment has increased even more rapidly: 41% during this time period. WCPSS is growing more diverse, with an increase in the percentage of non-White, low-income, and limited-English-proficient (LEP) students. The groups that have been growing more rapidly have historically shown lower achievement, presenting challenges to the system's efforts at raising overall achievement.

Testing Outcomes

WCPSS high school students have the opportunity to take a wide variety of national and state tests each year, including the SAT, Advanced Placement (AP) exams, state End-of-Course (EOC) tests, VoCATS tests in career/technical education courses, and a state writing assessment at 10th grade. The performance on these tests remains high compared to virtually all external benchmarks. However, several state tests and standards have been revised in recent years, and the standards for grade-level proficiency have been increased. The percentage of students able to score proficient has decreased, at the same time as graduation requirements have increased. Significant historical achievement gaps remain on each test as well, which were exacerbated on state tests with changes in standards.

National Tests

SAT scores for WCPSS students continue to outpace both the statewide and national averages, rising 58 points since 1990. At the same time, SAT participation rates in WCPSS remain higher than both the state and national rates, with 79% of graduating seniors in 2006-07 having taken the test.

- Although WCPSS student average SAT scores compare favorably with those of the state and nation, average scores have dipped the last two years at all three levels.

- WCPSS White, Hispanic/Latino, and Black/African American students outperform state and national performance within their ethnic group on the SAT, but gaps are considerable between the groups for WCPSS, the state, and the nation.

- Boys in WCPSS tend to score higher than girls, although this gap has closed somewhat since 1997-98.

Participation in Advanced Placement (AP) courses and AP exams have risen substantially in recent years for WCPSS students. Pass rates exceed state and national results.

- Participation rates in AP courses have increased substantially over time. Overall, 40% of 11th and 12th grade students participated in the AP program in 2006-07. On the average, each student takes two AP courses.

- By ethnicity, Asian students were most likely to enroll in AP courses, with Black/African American students least likely to enroll. By gender, girls were more likely to take AP courses than boys.

- The number of AP exams taken has nearly tripled since 1996-97. About three out of four AP test scores for WCPSS students met the passing criteria of 3 or greater, which shows mastery of course content, and which sometimes secures college credit for the test taker.

- The WCPSS passing rate was slightly higher than in 2005-06, but slightly lower than in 1996-07 before participation rates tripled. The WCPSS pass rate of 76% remains above both the state and national passing rates of 58% and 59%, respectively, in 2006-07.

- On AP exams, ethnic gaps for passing rates between White, Asian, and Hispanic/Latino students are very small, but the gap is considerable between these groups and Black/African American students. Overall, 51% of Black/African American students in WCPSS earned passing scores, slightly below national and state overall performance of 59%.

State Tests

Many EOC tests were revised in the last two years, with more rigorous standards for proficiency imposed. Passing rates in 2006-07 for all revised tests ranged from 72.8% to 79.9%. For those tests that have been in place two years, U.S. History and Civics and Economics, proficiency rates increased slightly, with about three fourths of students reaching proficiency standards.

- Similar to SAT results, EOC tests also showed considerable performance gaps between students in different ethnic groups, with Black/African American and Hispanic/Latino students showing the lowest proficiency. Achievement gaps increased for tests with new standards.

- Gaps are also evident by socioeconomic status, limited English proficiency status, and disability status. The size and trends for these gaps, however, vary by test.

- Reversing trends seen in elementary and middle schools, male students outscored female students on six of seven EOC tests given in 2006-07, although female students out-scored males in English I.

Although performance on the 10th grade writing assessment continues to be higher that the state, proficiency rates have remained relatively stable since 2003-04, with 66% of students scoring proficient in 2006-07.

Scores on VoCATS tests, which are given to students in career and technical education courses, have increased over time. Proficiency rates on those tests remain above the statewide rates in six out of eight program areas.

Other Student Outcomes

Graduation, Retention, and Dropout Rates

Graduation, retention, and dropout rates all showed negative changes between 2005-06 and 2006-07, likely because of increased standards for graduation and for passing required End-of-Course tests.

The four-year high school graduation rate for WCPSS in 2006-07 was 79.3%, lower than 2005-06, which was 82.6 %.

- Rates for both years were higher than comparable North Carolina school districts and the state as a whole (DPI, 2007). Rates for WCPSS were second highest among the largest 50 districts in the nation in 2005-06 and tenth highest in 2006-07 (Edweek, 2007).

- Graduation rates in 2006-07 were higher for female students than males. Student subgroups with the lowest graduation rates were Hispanic/Latino students (55.3%) and students with limited English proficiency (44.6%). On a positive note, graduation rates for free or reduced-price lunch (FRL) students increased from 59.7% to 63.3% between 2005-06 and 2006-07.

WCPSS students are promoted at a high rate. However, differences exist by grade span, ethnicity, academic risk factors, and gender.

- In 2006-07 95.4% of all K-12 students in WCPSS were promoted and 4.6% were retained (5,856 students). Over 90% of students in all the No Child Left Behigh (NCLB) subgroups (ethnicity, FRL, SWD, and LEP) in WCPSS were promoted.

- High school typically has a much higher retention rate than the other grade spans. In 2006-07, grade 9 had the highest retention rate (19.5%), followed by grades 10 (10.7%) and 11 (7.3%). All three grades had an increase over the 2005-06 school year. The 9th-grade increase was the most alarming, increasing from 15% in 2005-06 to 19.5% in 2006-07. Thus, one in five ninth graders in 2007-08 is repeating one or more courses taken in 2006-07.

- Students in various subgroups in WCPSS show different rates of retention. The subgroups with the highest rates of retention in both of the past two years include FRL, SWD, LEP, Hispanic/Latino, and Black/African-American.

The 2006-07 WCPSS high school dropout rate was 4.2%, a slight increase from 2005-06 (3.9%). Rates have increased slightly each of the past four years. Since 1998-99, the WCPSS high school dropout rate has been lower than the corresponding statewide rate. By ethnicity, Hispanic/Latino students have had the highest dropout rates over time, followed by Black/African-American students.

Performance of WCPSS Graduates in the UNC System

Compared to students enrolled in University of North Carolina (UNC) institutions overall, WCPSS graduates appear to be better prepared and more successful. WCPSS students are:

- more likely to have a grade point average above 3.0 after their first year,
- more likely to be returning to school following their first and second years,
- less likely to take remedial courses in college, and
- more likely to graduate within five years.

Accountability Outcomes

ABCs Results

The standards in the revised state accountability model, put in place in 2005-06, have proven to be more difficult for high schools to meet than the previous model. The percentage of schools able to meet growth standards improved somewhat between 2005-06 and 2006-07, but the percentage earning recognitions did not.

- From 1998-99 through 2004-05, all WCPSS high schools met at least expected growth on the ABCs. In 2005-06, this declined to 73.7%, but the percentage improved to 81.8% in 2006-07.

- ABC recognitions, which incorporate growth, performance, and AYP into the model, were more positive in WCPSS than in the state. WCPSS had more high schools earning the School of Distinction recognition (23% compared to 7% statewide) and fewer in the Priority and Low Performing categories (14% versus 35%). Green Hope High School earned the Honor School of Excellence designation for the second year in a row.

- Within WCPSS, 2006-07 recognition results were less positive than in 2005-06, with a lower percentage of schools earning School of Distinction or Honor School of Excellence recognitions (27% versus 39%) and a higher percentage considered a Priority school (14% versus 6%).

- The growth results for EOC tests varied widely by tests and school year. In 2006-07 the more positive results were in English I where 87% of WCPSS high schools achieved either expected (23%) or high growth (64%). On the other hand, biology had the least positive results with only 24% of WCPSS high schools achieving either expected (5%) or high growth (19%).

Adequate Yearly Progress (AYP) Results

A lower percentage of WCPSS schools was able to meet AYP in 2006-07 compared to 2005-06. New English I and Algebra I tests, with higher proficiency standards, contributed to this decline. Since AYP standards continue to target 100% proficiency by 2013-2014, meeting these standards in North Carolina has become more difficult.

- Overall, 28.5% of WCPSS high schools met AYP standards in 2006-07, down from 50% of WCPSS high schools in 2005-06. Six schools met AYP, and six missed only 1 or 2 targets.

- Across all WCPSS high schools, 356 of 415 (86%) of targets were achieved in 2006-07, down from 92% in 2005-06. High schools averaged 20 targets. The most commonly missed targets were for participation in testing, students with disabilities, and students eligible for free or reduced-price lunch.

- At the school system level, despite meeting over 87% of targets (66 of 76), WCPSS continued in Title I "district improvement" status. This was because one or more reading targets were missed in all three grade spans (3-5, 6-8, and 10) for three consecutive years. A systemwide plan for improvement is being implemented in response, as required by federal law.

Effective Practices

Studies of the most effective practices for achieving optimal growth in students' achievement in required EOC course areas suggest several strategies as critical: purposeful use of time, a tight focus on required curriculum, common planning, positive climate in class, and adapting to student needs.

INTRODUCTION AND DEMOGRAPHIC TRENDS

INTRODUCTION

For the second consecutive year, the Evaluation and Research Department (E&R) of the Wake County Public School System is pleased to produce a comprehensive summary of high school outcomes. The purpose of this report is to provide those interested in high school outcomes with all the data currently available about student outcomes and effective practices in one volume. Separate reports are being produced that focus on elementary and middle school outcomes. We believe these volumes will be helpful to members of Wake County Board of Education, school staff, central services staff, parents, and community members. This report differs from those written in the past, when Wake County Public School System's (WCPSS) Evaluation and Research Department produced separate reports and bulletins reflecting results on various tests and other student outcomes. One past report that did discuss student outcomes across instruments on a more limited scale was *WCPSS Outcomes Summary for 2004-05, with an Emphasis on Achievement Gap Status.*

Within each volume, the sections include:

- Demographic trends as of spring of each year. This will help contextualize student outcomes.
- Testing outcomes, which are organized by subject—literacy and math.
- Other student outcomes, including retention data, are also provided. The high school level also includes dropout and graduation results.
- Accountability outcomes, including school performance on state ABCs of Public Education and federal Adequate Yearly Progress (AYP) standards, associated with the No Child Left Behind accountability law.
- Findings related to effective practices from E&R studies, to provide ideas on what may or may not be helpful to students.

Decision Rules

Across the various sections of the report, the data presented represent all students in the school system with a few exceptions. Results from state-mandated tests in this report (End-of-Grade Tests and the Writing Test) are based only on students able to take the standard version of those assessments. Any exceptions to this general rule are explained within the relevant sections. Results for small numbers of students who take alternate or alternative tests in lieu of those standard assessments are not included, as they are being reported in an upcoming report on alternate assessments. These students are primarily those with moderate to severe disabilities and/or with limited English proficiency, and are relatively small in number, usually less than 5% of the student population. Therefore, the results in the required End-of-Course and Writing sections of the report are based on the vast majority of the students in WCPSS in those grade levels.

Group Counts

Throughout this document, we emphasize patterns in results based on percentages. However, we have included enough information to allow the reader to determine the number of students reflected in particular groups whenever feasible. In the demographic section, for example, we will present numbers for the student population in various sub-groups. In the bar graphs presented later, we will report percentages of students and the reader will remember that some population sub-groups are relatively small, while others are relatively large. The percentages presented in the bars, then, will represent different numbers of students. Counts are shown in footnotes or tables at the bottom of graphs when they are of particular importance to understand trends.

Ways to Use This Report

We hope our readers will be able to use this report in several ways:

- To learn about basic trends in outcomes for WCPSS students over time;
- To study achievement gaps over time;
- To get a sense of the number and percent of students who are doing well and how many students may need additional assistance to succeed; and
- To understand what practices might help in efforts to assist students in need.

We welcome feedback on the format and content of this report.

Acknowledgements

This report was truly a team effort across the Evaluation and Research Department. We gratefully acknowledge the help of all E&R staff.

A volume this large and comprehensive could not possibly have been produced without the efforts of many people. Evaluation and Research Department staff who made especially important contributions to the technical and production aspects of this report included Alonda Justice and Wendy Stevens.

DEMOGRAPHIC TRENDS

In this section we describe the nature of the students served in WCPSS, along with changes over time, as context for the student outcomes data that follow. To make the demographic and outcome data as parallel as possible within this report, we used student characteristics information reported in May of each year in the WCPSS Student Information locator program as our data source. Figures presented here will not match official 20th-day fall enrollments because of changes in the student population during the year.

K-12 Enrollment Trends over Time

By Ethnicity (K-12)

Across grades K-12, the number of students enrolled in WCPSS has been growing rapidly in recent years. Growth challenges all facets of the system's operations. As shown in Table 1, 30,459 new students have entered WCPSS schools since 2001, a 31% increase. For all ethnicities except American Indian, the numbers have increased each year. The numbers of Black/African American and Hispanic/Latino students have increased more rapidly than other ethnic groups. The number of Hispanic/Latino students has almost tripled since 2001, which is also true for Multiracial students.

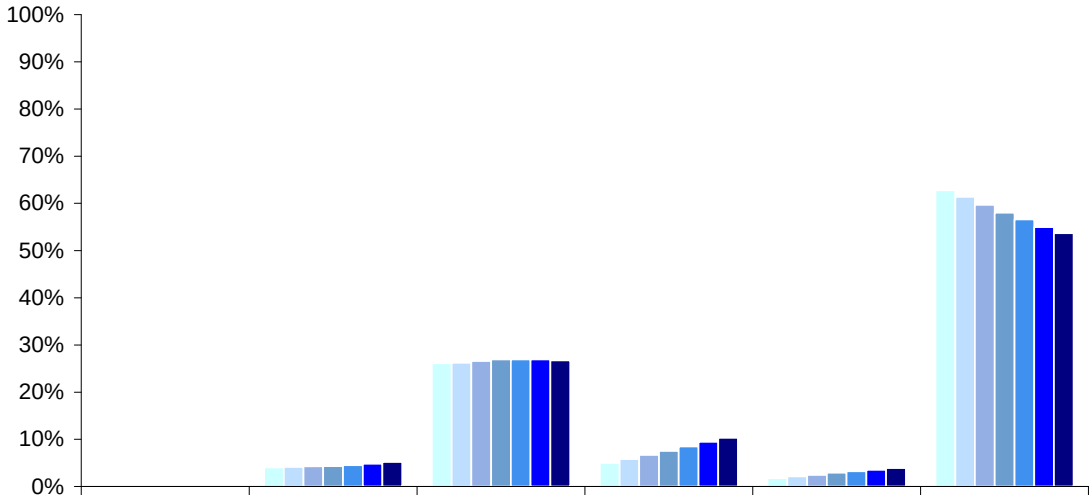
Table 1
Students by Ethnicity, Spring 2001-02 to 2006-07, Grades K-12

	2001	2002	2003	2004	2005	2006	2007	Net Increase
American Indian	271	266	270	293	306	326	339	68
Asian	3,925	4,180	4,483	4,694	5,108	5,830	6,601	2,676
Black/African American	25,493	26,473	27,778	29,307	30,684	32,609	34,131	8,638
Hispanic/Latino	4,855	5,877	6,978	8,197	9,676	11,447	13,195	8,340
Multiracial	1,732	2,157	2,583	3,159	3,682	4,304	5,041	3,309
White	61,246	61,959	62,372	63,062	64,478	66,598	68,674	7,428
All WCPSS K-12	97,522	100,912	104,464	108,712	113,934	121,114	127,981	30,459

Data Source: Analysis of WCPSS Student Locator annual May data

Figure 1 displays growth patterns as the percentage of the total district population represented by each ethnicity. The largest percentage increases were for Hispanic/Latino students (up five percentage points) and Multiracial students (up two percentage points). Accordingly, the proportion of WCPSS students who are White decreased (even while the number of White students steadily increased).

Figure 1
Student Population by Ethnicity, Spring 2001 to Spring 2007, Grades K-12



	American Indian	Asian	Black	Hispanic/Latino	Multiracial	White
2001 (97,522)	0.3%	4.0%	26.1%	5.0%	1.8%	62.8%
2002 (100,912)	0.3%	4.1%	26.2%	5.8%	2.1%	61.4%
2003 (104,464)	0.3%	4.3%	26.6%	6.7%	2.5%	59.7%
2004 (108,712)	0.3%	4.3%	27.0%	7.5%	2.9%	58.0%
2005 (113,934)	0.3%	4.5%	26.9%	8.5%	3.2%	56.6%
2006 (121,114)	0.3%	4.8%	26.9%	9.5%	3.6%	55.0%
2007 (127,981)	0.3%	5.2%	26.7%	10.3%	3.9%	53.7%

Data Source: Analysis of WCPSS Student Locator annual May data

By Academic Risk Factor (K-12)

In this report, risk factors are defined as students who have limited English proficiency (LEP), students with disabilities (SWD), and/or students who receive free or reduced-price lunch (FRL). Students in these categories often have lower academic proficiency rates. Detailed analyses in WCPSS have shown having more than one of these risk factors correlates with even lower proficiency rates.

Free or Reduced-Price Lunch Students (FRL)

School systems are required to monitor the achievement of low-income students for various purposes, including The Elementary and Secondary Education Act of 1965, as amended by the No Child Left Behind Act of 2001 (NCLB) regulations. Currently, students' FRL status is used as an indicator of socio-economic status. Although it is the best indicator available, it is not without problems, and federal officials are exploring other ways to monitor low-income status.

- One issue that arises from using FRL is that qualification for this program is not synonymous with meeting federal poverty level guidelines. To qualify, families may have an income up to 130% of the federal poverty level for free meals or 185% of the federal poverty level for reduced-price meals. Family size is also considered; the maximum income for a family of two is $25,327, while a family of five can earn $44,641.

- Another issue is that families of elementary school students are more likely to apply for FRL than are families of middle or high school students. The reason for this disparity may be due in part to a perception of being singled out, even though individual students' status is kept confidential. Nevertheless, elementary students are more likely to receive FRL than are middle or high school students.

Families have the opportunity to apply for FRL annually. In May 2007, there were 37,215 students in grades K-12 enrolled in the FRL program. This represented approximately 29% of the 127,981 WCPSS students. By level of school, FRL students represent 33% of elementary, 30% of middle, and 21% of high school students enrolled.

Students with Disabilities (SWD)

School districts throughout the nation are required to provide appropriate educational services in the least restrictive environment for students with disabilities. Such disabilities may be physical (blindness, hearing loss, etc.) or psychological (impaired cognitive processing, behavior disorders, etc.). The appropriate educational and support services to enable these students to make academic progress are determined by a committee of educators and other specialists along with the student's parents and are codified in the Individual Educational Plan (IEP) that represents a legal contract between the student's family and the school. The IEP is reviewed periodically and, as necessary, is up-dated.

The IEP specifies the manner in which educational progress will be measured. Many SWD students participate in the regular testing program, sometimes with testing accommodations or modifications. Such modifications are not intended to create an advantageous situation for the student. Rather, the modifications are efforts to ensure that the student's testing experience will result in a valid measure of his/her academic progress.

Historically, about 14% of WCPSS students are identified as students with disabilities. In 2007, there were 17,508 students in WCPSS who had disabilities. This is above the 12% cap that the state of North Carolina places on students for whom reimbursement of additional costs of education may be claimed. Thus, about the expenses for the 2% of students above the cap are borne solely by the district. None of these additional expenses is charged to the student's family, of course.

Limited English Proficient Students

Selected WCPSS students are designated as Limited English Proficient (LEP) based on their performance on the IDEA Proficiency Test (IPT). Any student whose home language survey indicates English is not the only language spoken in his or her home is assessed with this test upon entry into WCPSS. The IPT consists of four sections: Reading, Listening, Writing, and Speaking. Students can receive one of six levels of scores for each section: Novice Low, Novice High, Intermediate Low, Intermediate High, Advanced, and Superior. The results of the IPT are used to determine a student's LEP status; any student not scoring Superior in all four sections of the test is classified as LEP. LEP designation qualifies a student for ESL (English as a Second Language) services. LEP students remain eligible for these services until they score Superior on all four sections of the IPT.

In May 2007, 9,478 LEP students were enrolled in WCPSS across grades K-12. In K-12, the LEP percentage of the population is generally inversely related to grade. That is, as the grade increases (4^{th} to 5^{th}, etc.) the percentage of the grade population made up of LEP students within each successive grade is smaller.

Enrollments increased for all academic risk subgroups between Spring of 2001 and 2007, with the number of students who qualified as FRL increasing the most rapidly (see Table 2). The most common combinations of characteristics are FRL with LEP or SWD.

When the number within each risk group in Spring 2007 is compared with the number in Spring 2001, it will be seen that the number of LEP and FRL students increased at a considerably greater rate than the 31% increase true for the system overall (Table 1 and 2). The number of LEP students more than doubled, with an increase of almost 70% for FRL students. While the number of SWD students increased, WCPSS students who are SWD declined slightly as a percentage of the district population overall (Table 2 and Figure 2). Students with more than one academic risk characteristic, while relatively small in numbers, also increased more than the system increase in population overall, especially for the FRL and LEP combination (Table 2).

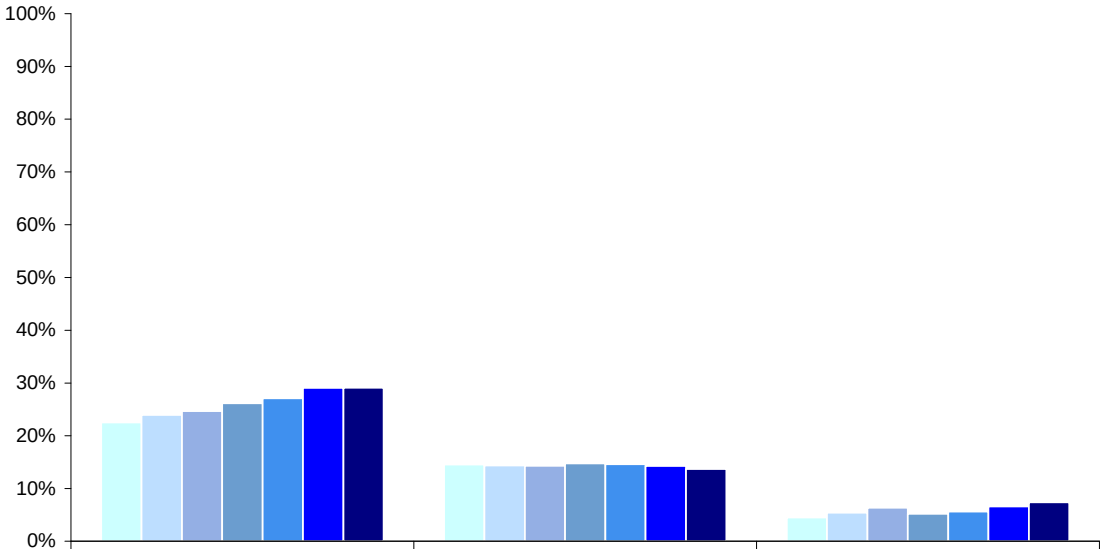
Table 2
Students by Risk Factor, Spring 2001-02 to 2006-07, Grades K-12

	2001	2002	2003	2004	2005	2006	2007
All FRL	21,959	24,172	25,782	28,428	30,881	35,195	37,215
All SWD	14,179	14,483	14,948	16,025	16,630	17,264	17,508
All LEP	4,398	5,451	6,610	5,659	6,371	7,989	9,478
FRL and LEP	2,686	3,455	4,157	3,801	3,982	5,429	6,172
FRL and SWD	4,806	5,134	5,320	5,851	6,050	6,752	6,689
LEP and SWD	72	96	128	109	115	128	191
FRL and LEP and SWD	204	289	387	408	441	553	725
All WCPSS	**97,522**	**100,912**	**104,464**	**108,712**	**113,934**	**121,114**	**127,981**

Note: Students can be counted more than once in the top section of this table (duplicated count). Students are counted only once on the bottom part of the table (unduplicated count).
Data Source: Analysis of WCPSS Student Locator annual May data

While the proportion of WCPSS students who are LEP or who qualify for FRL has increased over time, the percentage of students with disabilities has declined slightly (see Figure 2), even as the number of SWD students increased. The biggest impact of these changes has been an increase in the percentage of FRL students in WCPSS.

Figure 2
Student Population by Risk Factor, Spring 2001-07, Grades K-12



	All FRL	All SWD	All LEP
2001 (97,522)	22.5%	14.5%	4.5%
2002 (100,912)	24.0%	14.4%	5.4%
2003 (104,464)	24.7%	14.3%	6.3%
2004 (108,712)	26.1%	14.7%	5.2%
2005 (113,934)	27.1%	14.6%	5.6%
2006 (121,114)	29.1%	14.3%	6.6%
2007 (127,981)	29.1%	13.7%	7.4%

Data Source: Analysis of WCPSS Student Locator annual May data. Duplicated counts.
Interpretation Example: In 2006-07, 29.1% of all WCPSS students in grades K-12 were identified as FRL students compared to 22.5% in 2000-01.

Table 3 shows gender patterns within academic risk groups by ethnicity. The primary gender-related differences are within SWD groups, where the number of males is always larger than the number of females (except for Asian students who qualify for SWD and FRL designation) and in some comparisons is approximately double that of females.

Table 3
Students with Academic Risk Factors by Gender by Ethnicity, Spring 2007, Grades K-12

		Am Indian	Asian	Black	Hispanic/ Latino	Multi-Racial	White	Total
FRL	Female	42	470	10,208	4,558	790	2,441	18,509
	Male	51	470	9,964	4,867	774	2,580	18,706
	Total	93	940	20,172	9,425	1,564	5,021	37,215
SWD	Female	19	90	2,266	494	213	2,670	5,752
	Male	32	154	4,367	963	442	5,798	11,756
	Total	51	244	6,633	1,457	655	8,468	17,508
LEP	Female	1	554	279	3,411	54	245	4,544
	Male	1	669	270	3,623	63	308	4,934
	Total	2	1,223	549	7,034	117	553	9,478
FRL-SWD	Female	6	13	1,658	134	99	366	2,276
	Male	13	13	3,106	312	185	784	4,413
	Total	19	26	4,764	446	284	1,150	6,689
FRL-LEP	Female	1	174	198	2,606	24	90	3,093
	Male	0	197	188	2,576	21	97	3,079
	Total	1	371	386	5,182	45	187	6,172
SWD-LEP	Female	0	12	3	39	4	10	68
	Male	0	20	5	67	5	26	123
	Total	0	32	8	106	9	36	191
FRL-SWD-LEP	Female	0	11	16	227	2	6	262
	Male	0	10	20	419	4	10	463
	Total	0	21	36	646	6	16	725

Note: Duplicated count top section; unduplicated bottom section.
Data Source: May 2007 Student Locator.

High School Enrollment Trends by Ethnicity over Time

Over the past six years, the WCPSS high school population has increased 41%, from just under 25,000 students in 2001 to over 35,000 in 2007. The number of students has increased each year for all ethnic groups (see Table 4).

The number of Black/African American students increased the most, followed by White, and then by Hispanic/Latino students. The table also shows that, between Spring of 2001 and 2007, the number of Hispanic/Latino and Multiracial students more than tripled.

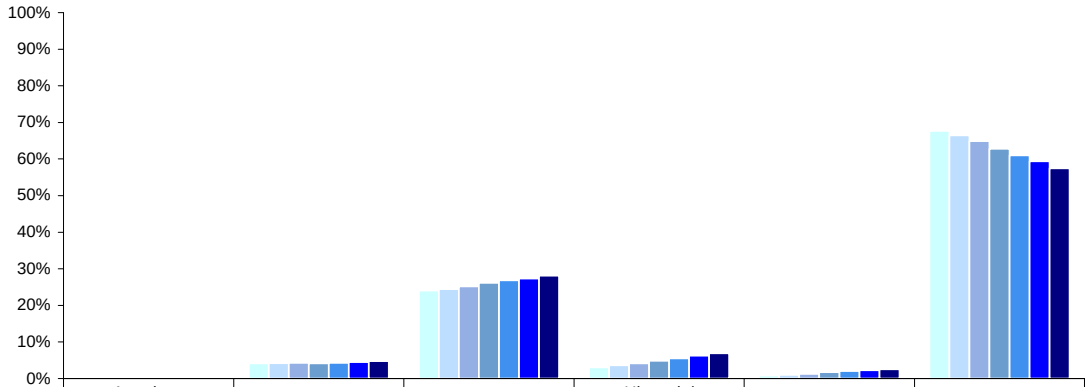
Table 4
High School Students by Ethnicity – Spring 2001 to Spring 2007

	2001	2002	2003	2004	2005	2006	2007	Net Increase
Asian	1,042	1,109	1,197	1,230	1,339	1,490	1,670	628
American Indian	49	53	58	75	91	92	88	39
Black/African American	6,002	6,444	7,013	7,702	8,377	9,067	9,891	3,889
Hispanic/ Latino	765	955	1,159	1,440	1,716	2,089	2,422	1,657
Multiracial	209	264	356	526	639	755	890	681
White	16,926	17,519	18,062	18,515	19,022	19,713	20,195	3,269
All WCPSS High School	**24,993**	**26,344**	**27,845**	**29,488**	**31,184**	**33,206**	**35,156**	**10,163**

Data Source: Analysis of WCPSS student May Locator, May Data.

While Table 4 shows that all ethnicities have increased in number, Figure 3 shows a decreasing percentage of White students relative to the total high school population. As with the district overall, the graphic indicates a growing percentage of Black/African American, Hispanic/Latino, and Multiracial students in WCPSS. With these three groups growing at a faster pace, White students represent decreasing percentages of the overall membership.

Figure 3
Percentage of High School Student Population by Ethnicity – Spring 2001 to Spring 2007



	American Indian	Asian	Black	Hispanic/ Latino	Multiracial	White
2001 (24993)	0.20%	4.17%	24.01%	3.06%	0.84%	67.72%
2002 (26344)	0.20%	4.21%	24.46%	3.63%	1.00%	66.50%
2003 (27845)	0.21%	4.30%	25.19%	4.16%	1.28%	64.87%
2004 (29488)	0.25%	4.17%	26.12%	4.88%	1.78%	62.79%
2005 (31184)	0.29%	4.29%	26.86%	5.50%	2.05%	61.00%
2006 (33206)	0.28%	4.49%	27.31%	6.29%	2.27%	59.37%
2007 (35156)	0.25%	4.75%	28.13%	6.89%	2.53%	57.44%

Data Source: Analysis of WCPSS Student Locator annual May data
Interpretation Example: In 2006-07, Black students composed 28.1% of high school student population, compared to 24.0% in 2000-01.

High School Enrollment Trends Overall and by Academic Risk Factor over Time

Table 5 shows the number of high school students in membership who had academic risk factors such as being eligible for free and reduced-price lunch (FRL), having disabilities (SWD), or having limited English proficiency (LEP) in the spring of each year (as well as combinations of these academic risk factors). All three academic risk factor categories show increases since 2001 that considerably outpace the overall level of growth in the high school student population during that same time span. The number of FRL students more than doubled, with the number of LEP students almost doubling, and the number of SWD students increasing by over 50%. In each year, those students with the FRL academic risk factor were most common, followed by those students with the SWD academic risk factor. The most common combination of academic risk factors for students was FRL and SWD (4.6% of the high school population).

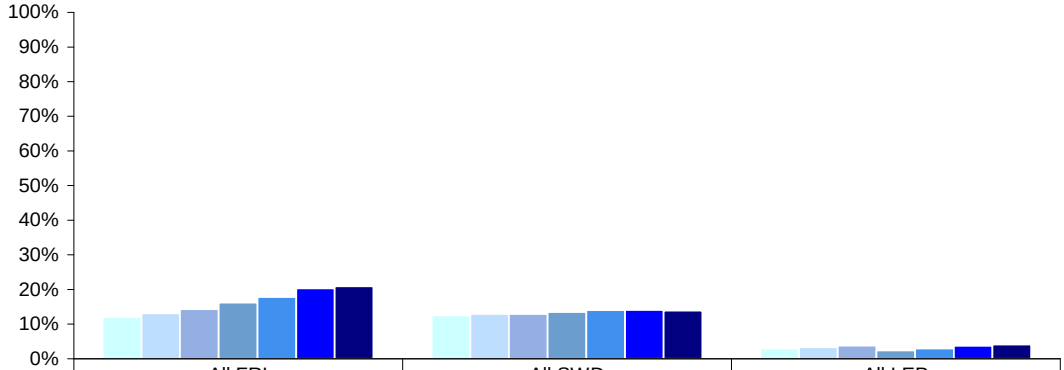
Table 5
Increase in High School Students by Academic Risk Factor – Spring 2001 to Spring 2007

	2001	2002	2003	2004	2005	2006	2007
All FRL	3,005	3,446	3,989	4,790	5,547	6,745	7,336
All SWD	3,125	3,398	3,604	3,992	4,357	4,682	4,884
All LEP	736	873	1,055	715	916	1,213	1,435
FRL and LEP	355	442	502	396	513	722	792
FRL and SWD	717	865	995	1,163	1,335	1,573	1,614
LEP and SWD	10	12	16	9	15	20	30
FRL & LEP & SWD	8	11	17	14	25	46	66
All WCPSS High School	24,993	26,344	27,845	29,488	31,184	33,206	35,156

Data Source: Analysis of WCPSS Student Locator annual May data.

Figure 4 displays the percentage of the overall high school population each year by all FRL, all SWD, and all LEP academic risk factors. The graphic indicates a marked, steadily increasing percentage of free and reduced lunch (FRL) students (20.9% relative to the total high school population in 2006-07). The percentage of LEP and SWD students increased slightly, but much less than for FRL students.

Figure 4
Percentage of WCPSS High School Student Population by Academic Risk Factor
Spring 2001 to Spring 2007



	All FRL	All SWD	All LEP
2001 (24,993)	12.0%	12.5%	2.9%
2002 (26,344)	13.1%	12.9%	3.3%
2003 (27,845)	14.3%	12.9%	3.8%
2004 (29,488)	16.2%	13.5%	2.4%
2005 (31,184)	17.8%	14.0%	2.9%
2006 (33,206)	20.3%	14.1%	3.7%
2007 (35,156)	20.9%	13.9%	4.1%

Data Source: Analysis of WCPSS Student Locator annual May data

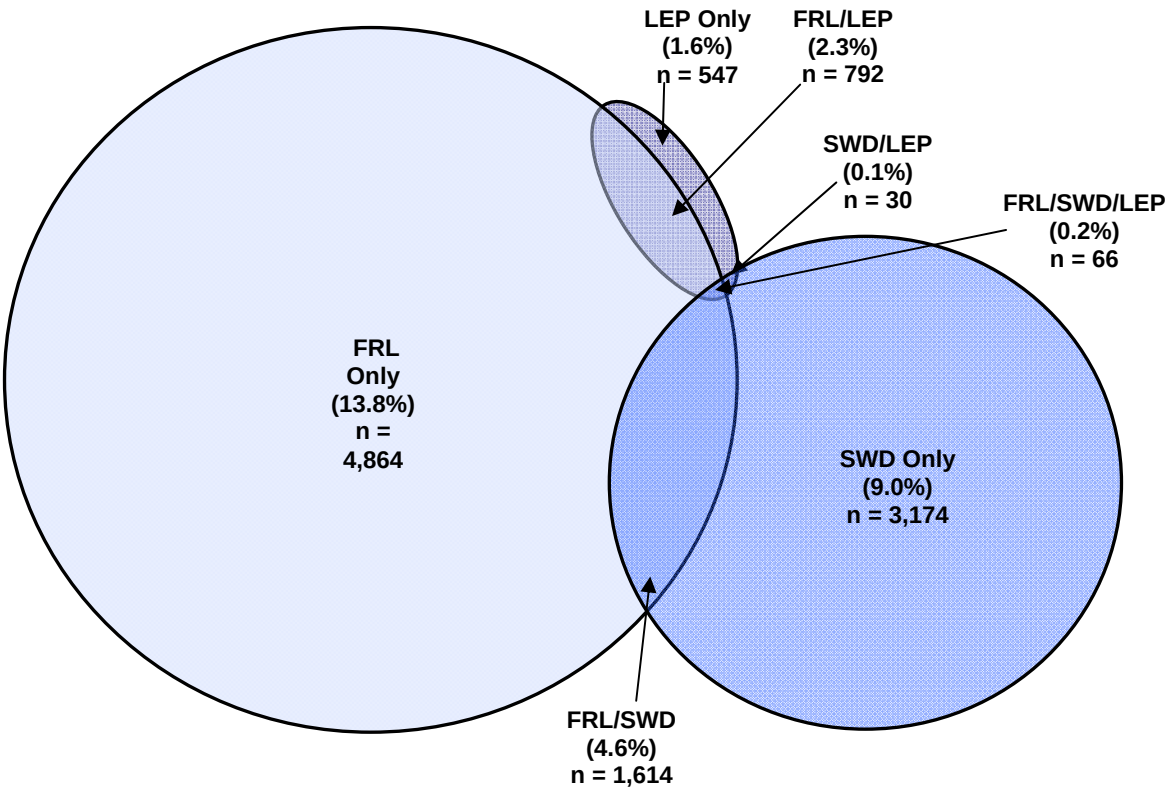
In 2006-07, about one third of the high school students had one or more academic risk factors of FRL, SWD, or LEP. Figure 5 proportionally displays the 31.6% of students with various combinations of academic risk factors in 2006-07 relative to the overall high school population. Unlike the graph above, each student is included only once (unduplicated counts). In general, students who were FRL only made up the largest group, followed by those who were SWD only. The most common combination of academic risk factors for students was FRL/SWD. Only 66 students had all three risk factors.

- In WCPSS high schools in 2006-07, close to 5,000 students (13.8%) were identified as having FRL as a single academic risk characteristic. Much smaller percentages of students had combinations of factors—4 .6% were identified as FRL and SWD, 2.3% were FRL and LEP, and 0.2% had all three of the risk characteristics.

- More than 3,000 (9.0%) high school students were identified as having SWD as a single risk characteristic; with about 5% having other risk factors in addition to SWD.

- Only about 4% of the high school students (1,435) with academic risks overall are LEP students. Most were LEP and FRL (2.3%), with 1.6% LEP only, and 0.3% with SWD or a combination of all risk factors.

Figure 5
Percentage of All High School Students with Academic Risk Factors, Spring 2007



N = 35,156 high school students
Note: Unduplicated counts. Each student is included in only one segment of the display.
Data Source: May 2007 Student Locator

High School Students with Academic Risk Factors by Gender and by Ethnicity

Table 6 shows the percentage of students in the FRL, SWD, and LEP categories at the high school level by gender and ethnic group. These data indicate that:

- Overall, the number of males in the SWD and the FRL-SWD categories are almost twice as high as the number of females. Within subgroups, the White, Black/African American, and Multiracial students mirror this pattern most closely.
- The number of Black/African American students is disproportionately higher in the FRL- and SWD-related categories than other ethnic groups. In addition, the number of Hispanic/Latino students is disproportionately higher in LEP-related categories than other ethnic groups.

Table 6
High School Students with Academic Risk Factors by Gender by Ethnicity, Spring 2007

Risk Factor	Gender	Am Indian	Asian	Black	Hispanic/ Latino	Multi-Racial	White	Total
FRL	Female	9	106	2,489	590	91	472	3,757
	Male	3	116	2,244	646	99	471	3,579
	Total	12	222	4,733	1,236	190	943	7,336
SWD	Female	7	25	710	102	43	803	1,690
	Male	6	28	1,318	139	74	1629	3,194
	Total	13	53	2,028	241	117	2,432	4,884
LEP	Female	0	124	89	408	6	43	670
	Male	0	142	70	488	3	62	765
	Total	0	266	159	896	9	105	1,435
FRL-SWD	Female	1	1	457	32	12	81	584
	Male	1	3	794	48	26	158	1,030
	Total	2	4	1,251	80	38	239	1,614
FRL-LEP	Female	0	42	66	259	1	21	389
	Male	0	54	50	280	2	17	403
	Total	0	96	116	539	3	38	792
SWD-LEP	Female	0	1	0	8	1	2	12
	Male	0	2	2	8	0	6	18
	Total	0	3	2	16	1	8	30
FRL-SWD-LEP	Female	0	2	3	23	0	1	29
	Male	0	1	3	30	0	3	37
	Total	0	3	6	53	0	4	66

Note: Duplicated count top section; unduplicated bottom section.
Data Source: Analysis of WCPSS Student Locator 2007 May data.

Monitoring the numbers and distribution of students across these three categories is particularly important since higher percentages of students in these categories tend to have difficulty in showing strong academic performance. The subsequent sections of this document will detail overall academic outcomes on a variety of measures for high school students, including the performance of these subgroups of students.

TESTING OUTCOMES

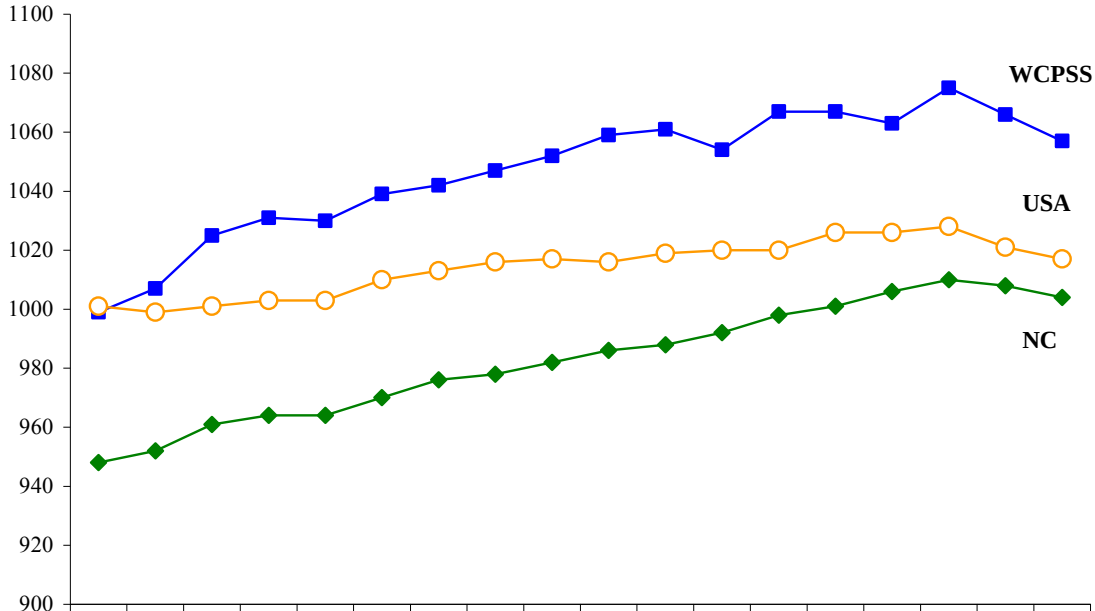
SAT RESULTS

The SAT, formally known as the SAT I Reasoning Test, is a national examination offered by the College Board. The exam measures potential for success at the post-secondary level. While students take the test on a voluntary basis, results are required for admission to many colleges and universities. The SAT administered in 2006-07 was a three-hour test of general verbal and mathematical skills along with a writing component. All three components of the exam used a multiple-choice format, with the writing component having a short essay component as well. All parts were scored on a scale from 200 to 800 points. Nationwide, close to 1.5 million students in the 2006-07 graduating class took the SAT through March of 2007 (College Board, 2007). For additional information about the SAT, consult the College Board's Web site at http://www.collegeboard.com.

This section of the report summarizes national, state, and WCPSS SAT data for seniors who took the test any time during their high school years through March 2007. If a student took the test more than once, the most recent score is used. Although students can take the SAT multiple times during their high school years, the College Board reports only the most recent test score of students who indicate they plan to graduate in the reporting year. Students are counted only once no matter how often they took the exam.

Since 1990, the average SAT combined score (historically reported as verbal/reading and mathematics only, not including the writing component) for WCPSS students has consistently been higher than the U.S. and North Carolina. In addition, WCPSS and North Carolina scores have increased much more rapidly than the U.S. during this period. The average scores for WCPSS and North Carolina have increased 58 and 56 points, respectively, compared to 16 points for the U.S. Thus, the positive gap between WCPSS SAT performance and that of the nation has increased since 1990. Average scores for WCPSS, North Carolina, and the U.S. have all dropped slightly in the last two years, but the pattern of performance has stayed the same.

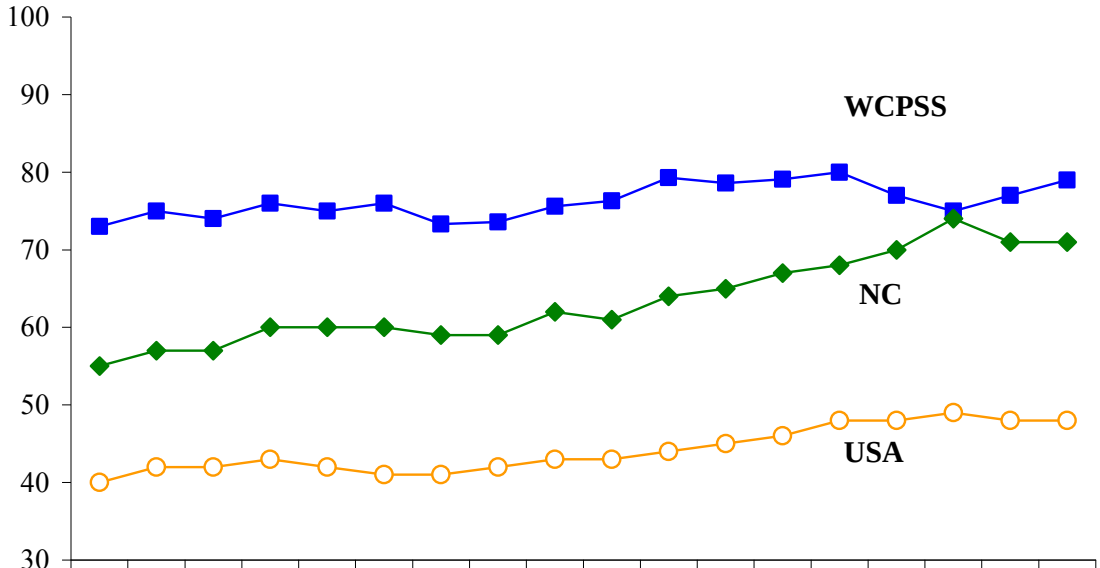
Figure 6
SAT Performance for WCPSS, NC and the U.S.
1990-2007



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
WCPSS	999	1007	1025	1031	1030	1039	1042	1047	1052	1059	1061	1054	1067	1067	1063	1075	1066	1057
USA	1001	999	1001	1003	1003	1010	1013	1016	1017	1016	1019	1020	1020	1026	1026	1028	1021	1017
NC	948	952	961	964	964	970	976	978	982	986	988	992	998	1001	1006	1010	1008	1004

The SAT participation rate for WCPSS students (defined as the percentage of graduating seniors in a given year who took the SAT prior to graduating) has always exceeded the corresponding rates for the state and the nation. North Carolina has experienced a 16 percentage point increase on this dimension, moving from 55% to 71% since 1990. The state is now within eight percentage points of the WCPSS rate, which has risen from 73% in 1990 to 79% in 2007. Nationally, there have never been more than 49% of students participating in the SAT during the 18-year period under consideration.

Figure 7
SAT Participation Rates for WCPSS, NC and the U.S.
1990-2007



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
WCPSS	73	75	74	76	75	76	73	74	76	76	79	79	79	80	77	75	77	79
NC	55	57	57	60	60	60	59	59	62	61	64	65	67	68	70	74	71	71
USA	40	42	42	43	42	41	41	42	43	43	44	45	46	48	48	49	48	48

In 2006-07, students in Wake County Public Schools (WCPSS) posted average SAT scores of 538 in mathematics, 519 in critical reading, and 505 in writing. The combined score for mathematics and reading was 1057, while the total score was 1562. Scores for WCPSS students in 2006-07 were higher on all parts of the test than North Carolina or the U.S.

Table 7
2006-07 SAT Participation Rates and Performance

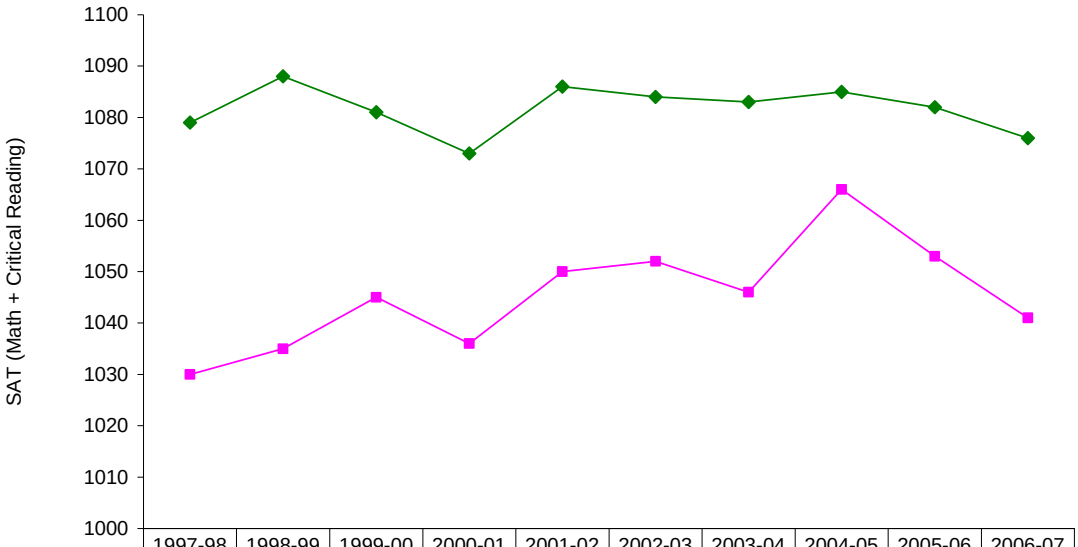
	2006-07					
	Part. Rate	Math	Critical Reading	M+CR	Writing	M+CR+W
USA	48%	515	502	1017	494	1511
NC	71%	509	495	1004	482	1486
Wake County	79%	538	519	1057	505	1562

Note: The participation rate is the percentage of 2006-07 graduating seniors who took the SAT. The Verbal section is now referred to as Critical Reading. Also, Writing is now reported as a subscore, making the total score up to 2400.

SAT Results by Subgroup

Historically, male students have outperformed female students on the SAT. This gap however, narrowed from 49 points in 1997-98 to a low of 19 points in 2004-05 but increased again in the last two years (Figure 8). This change has occurred even though the percentage of female test-takers in WCPSS has remained steady at 47% over the past four school years.

Figure 8
SAT Performance by Gender
WCPSS, 1998-2007



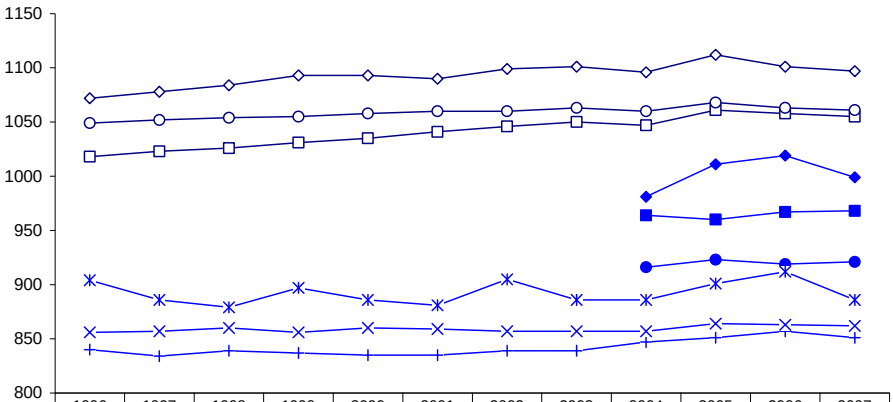
	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Male	1079	1088	1081	1073	1086	1084	1083	1085	1082	1076
Female	1030	1035	1045	1036	1050	1052	1046	1066	1053	1041

Interpretation Example: Males' SAT scores have dropped three points between 1997-98 and 2006-07. Females' scores have increased by 11 points.

Performance for the largest ethnic groups is shown for WCPSS, NC, and U.S. students on the SAT in Figure 9.

- White students show the highest performance, followed by Hispanic/Latino, followed by Black/African American students.
- Within each of these ethnic groups, WCPSS students outperform those in the U.S. and NC.
- The gap in total SAT scores (math and verbal/critical reading sections) between Black/African American and White students statewide, and nationally, has hovered around 200 points since 1996. In WCPSS, the gap was slightly smaller in the earlier years monitored, but it widened over time and is now similar to the state and nation.
- The gap between Hispanic/Latino and White students in WCPSS was about 100 points in 2007, slightly larger than in prior years because Hispanic/Latino scores dropped 20 points between 2006 and 2007.

Figure 9
SAT Performance by Ethnicity
WCPSS, 1996-2007



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
WCPSS White	1072	1078	1084	1093	1093	1090	1099	1101	1096	1112	1101	1097
NC White	1018	1023	1026	1031	1035	1041	1046	1050	1047	1061	1058	1055
USA White	1049	1052	1054	1055	1058	1060	1060	1063	1060	1068	1063	1061
WCPSS Hisp/Latino									981	1011	1019	999
NC Hisp/Latino									964	960	967	968
USA Hisp/Latino									916	923	919	921
WCPSS Black	904	886	879	897	886	881	905	886	886	901	912	886
NC Black	840	834	839	837	835	835	839	839	847	851	857	851
USA Black	856	857	860	856	860	859	857	857	857	864	863	862

2006-07 WCPSS: White *n* = 3,706
Hispanic/Latino *n* = 219
Black *n* = 994

Note: Data for Hispanic/Latino students not reported prior to 2003-04 due to fewer than 100 test-takers in WCPSS.

In summary, WCPSS students score considerably higher, on average, than students nationwide or in the state, overall and for each major ethnic group. Since 1990, SAT average scores have increased, with WCPSS and NC showing much stronger improvement than the U.S. averages. SAT scores have dropped somewhat in the last two years in WCPSS, though a drop has also occurred in the nation and state as well. Males tend to outperform females overall, with the gap closing somewhat over the past ten years.

ADVANCED PLACEMENT RESULTS

The purpose of the Advanced Placement (AP) program is to offer college-level courses to high school students. Administered by the College Board, the AP program includes both courses as well as a testing program which colleges and universities may utilize to grant credit to students who have done well on AP examinations. More than 15,000 U.S. high schools offer AP coursework of some kind, and more than 1.2 million U.S. high school students took at least one AP exam during the 2004-05 school year (College Board, 2005).

Administered each spring, AP examinations test students' ability to perform at college level in 19 subject areas. AP examinations are scored on a five-point scale. The scale is defined by the College Board as follows:

1—no recommendation
2—possibly qualified
3—qualified
4—well qualified
5—extremely well qualified

Many colleges and universities provide course credit to students scoring a 3 or higher on some AP exams. For additional information about AP courses and the AP testing program, consult the College Board's Web site at http://www.collegeboard.com.

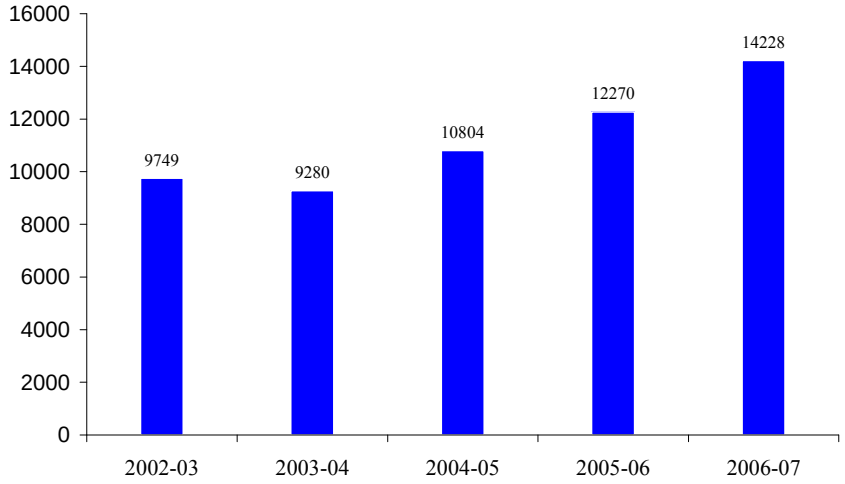
AP Course Participation

Participating in an AP course can give high school students exposure to more rigorous curricula and higher performance expectations than might otherwise be available to them through a typical high school course. One goal of moving to a block schedule in most high schools was an increase in opportunities for students to take more rigorous courses. Primarily taken by juniors and seniors, AP courses provide students with the opportunity to learn material in greater breadth and depth while in turn demanding more from them in terms of assignments and assessments. Although many AP courses have prerequisite courses that students must complete successfully before they can enroll, others do not.

All high schools strive to make advanced coursework such as AP courses accessible to as many students as possible. However, the intellectual demands of those courses (and/or the school's perceptions of those demands) can discourage some students from enrolling. Requirements from the College Board with regard to curriculum standards and teacher preparation also may make it difficult for schools to offer the range of courses and number of sections of a course that would allow every student to take every AP course that they desired.

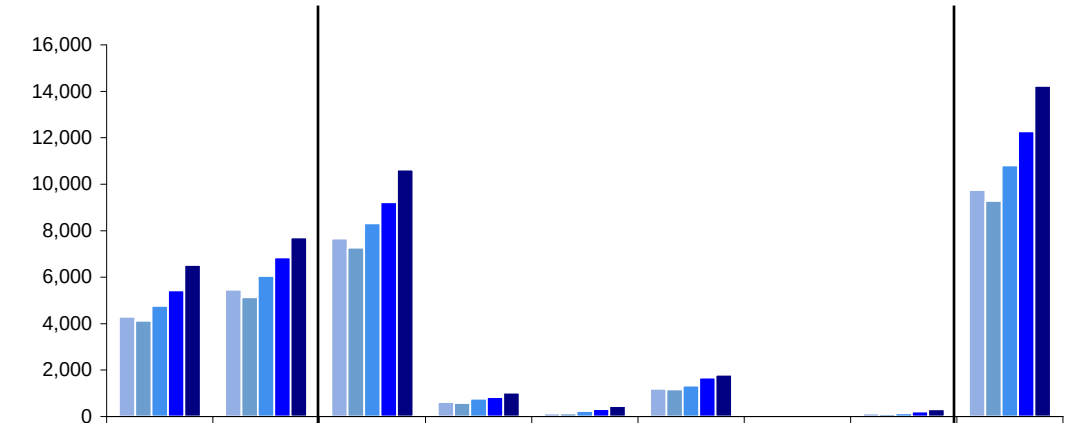
Due to their prestigious reputation and the high-quality learning experience that these courses can offer to students, AP course-taking is often used as an indicator of both excellence and equity at the high school level. Figure 10 shows that the number of AP course enrollments in WCPSS has been rising over the past three years. While the overall student population has also been increasing during this time, the growth in AP enrollments outpaces student population growth (e.g., the increase is not just attributable to enrollment growth). Thus, one goal of the block schedule appears to have been realized. This increase is also evident across various student subgroups (Figure 11). American Indian students are the only ethnic subgroup that has not experienced an increase in AP enrollments since 2002-03.

Figure 10
Number of AP Course Enrollments in WCPSS, 2002-03 through 2006-07



Interpretation Example: Students were enrolled in 14,228 AP courses in WCPSS high schools in 2006-07. This represents fewer than 14,228 students enrolled, since students can be enrolled in multiple courses.

Figure 11
Number of AP Course Enrollments in WCPSS by Subgroup, 2002-03 through 2006-07

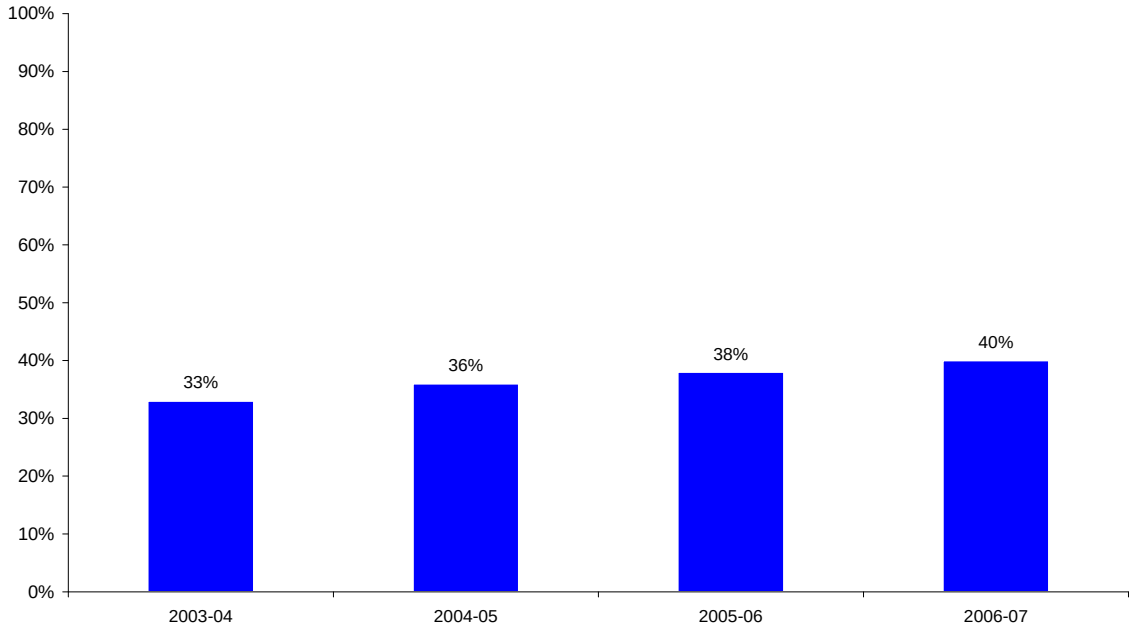


	Male	Female	White	Black	Hispanic	Asian	Am Indian	Multiracial	WCPSS
2002-03	4,288	5,461	7,657	617	132	1,188	25	130	9,749
2003-04	4,121	5,129	7,269	583	133	1,163	29	103	9,280
2004-05	4,759	6,045	8,313	772	232	1,333	15	139	10,804
2005-06	5,430	6,840	9,220	832	316	1,676	12	214	12,270
2006-07	6,522	7,706	10,624	1,031	449	1,793	24	307	14,228

Note: Students are counted once by gender, once by ethnicity, and once in WCPSS total.
Interpretation Example: Female students in WCPSS high schools were enrolled in 7,706 AP courses during the 2006-07 school. This is an increase of 866 course enrollments over 2005-06.

While the aforementioned data are based on enrollments, which in some cases involve the same students taking more than one course, it is also instructive to examine the pattern of *unique* students who are accessing AP courses, as it is often the same students who end up enrolling in multiple courses. Figure 12 displays the percentage of WCPSS high school students who enrolled in at least one AP course over the past three years. This percentage has increased seven percentage points in recent years, indicating higher proportions of WCPSS students are attempting these rigorous courses.

Figure 12
Percent of WCPSS Students Enrolling in AP Courses, 2004-2007

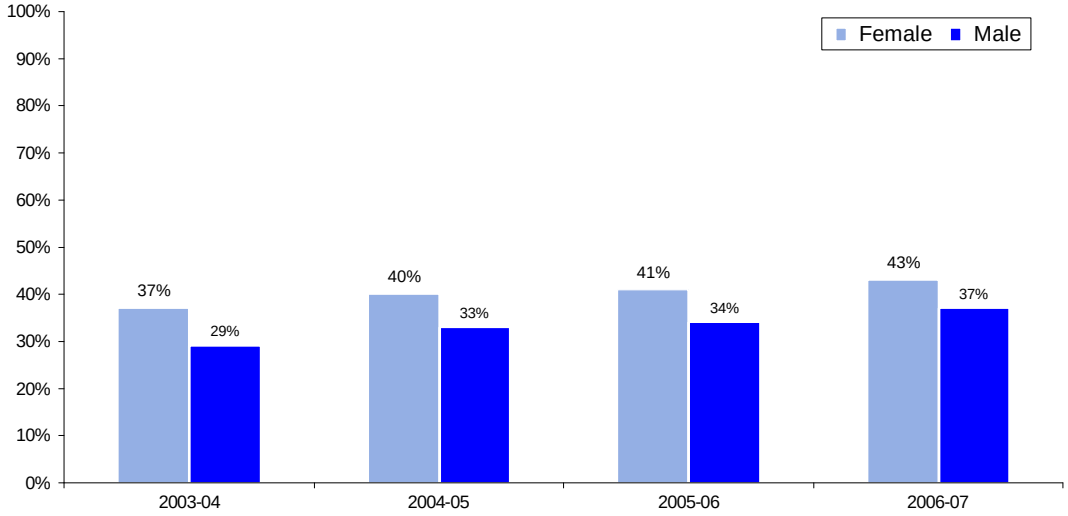


Note: Percentage is based on 11th and 12th grade students, as most AP course takers are in those grade levels.

Interpretation Example: 40% of all high school students in WCPSS were enrolled in at least one AP course in 2006-07, and increase of 2 percentage points over 2005-06.

With respect to student subgroups, female students are more likely than male students to enroll in an AP course (Figure 13), a pattern that is continuing even as overall enrollment is rising.

Figure 13
Percent of WCPSS Students Enrolling in AP Courses by Gender, 2004-2007

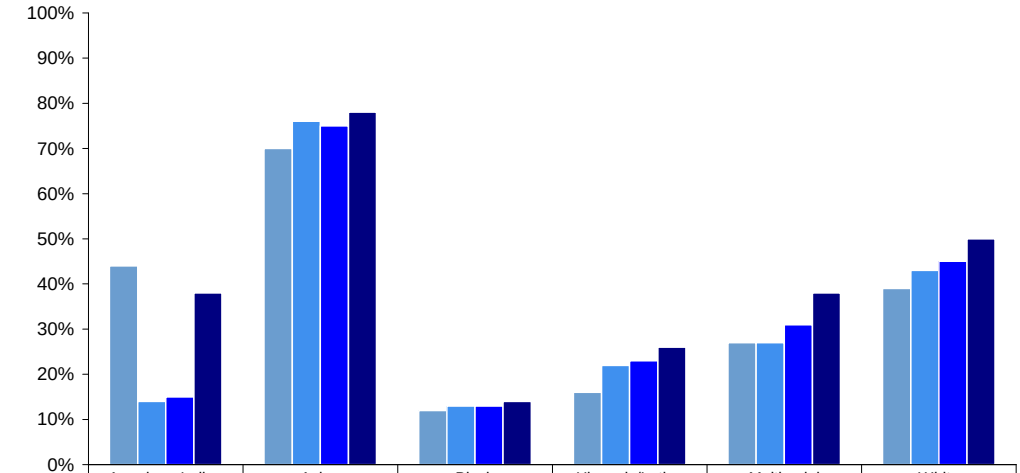


Note: Percentage is based on 11th-and 12th-grade students, as most AP course takers are in those grade levels.

Interpretation Example: In 2006-07, 43% of girls and 37% of boys in WCPSS were enrolled in at least one AP course.

Figure 14 shows that Asian students are proportionately more likely than students from other ethnic groups to enroll in at least one AP course. Black/African American students are least likely to enroll in one or more AP courses. Several groups have increased their enrollments 10-11 percentage points over the past several years, including Hispanic/Latino, Multiracial, and White students. For example, 26% of Hispanic/Latino students enrolled in at least one AP course in 2006-07, up from only 16% in 2003-04.

Figure 14
Percent of WCPSS Students Enrolling in AP Courses by Ethnicity, 2004-2007



	American-Indian	Asian	Black	Hispanic/Latino	Multiracial	White
2003-04	44%	70%	12%	16%	27%	39%
2004-05	14%	76%	13%	22%	27%	43%
2005-06	15%	75%	13%	23%	31%	45%
2006-07	38%	78%	14%	26%	38%	50%

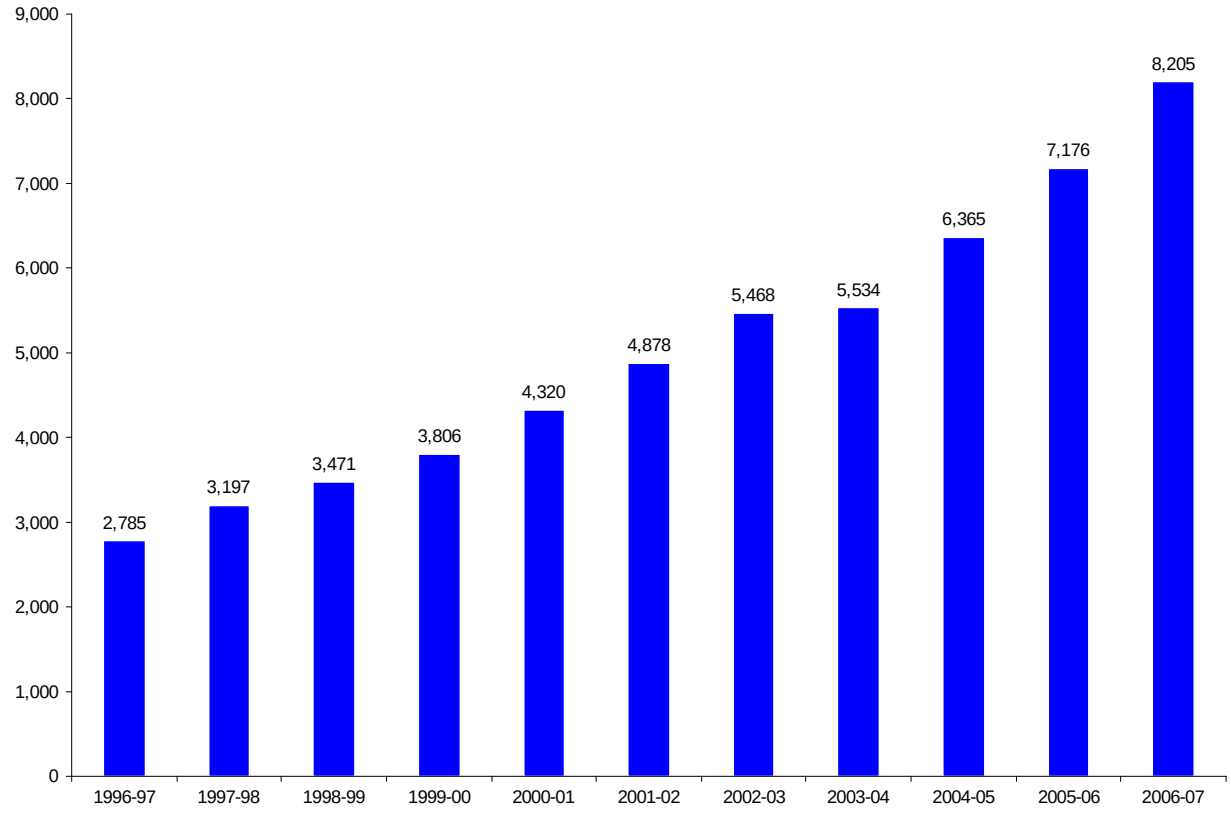
Note: Percentage is based on 11th and 12th grade students, as most AP course takers are in those grade levels

.Interpretation Example: 78% of Asian high school students in WCPSS were enrolled in at least one AP course in 2006-07, which represents an increase of 3 percentage points over the previous year.

AP Exam Participation

Not all high school students take AP courses, and not all students who take AP courses take the corresponding AP exams for those courses. In addition, there are a small number of students each year who take AP exams without taking the corresponding AP course. As the number of AP enrollments has increased, the total number of AP tests taken in WCPSS has increased as well over the past several years (Figure 15). In 2006-07, over 8,200 AP tests were taken by WCPSS students. This is close to triple the number of AP tests taken in 1996-97.

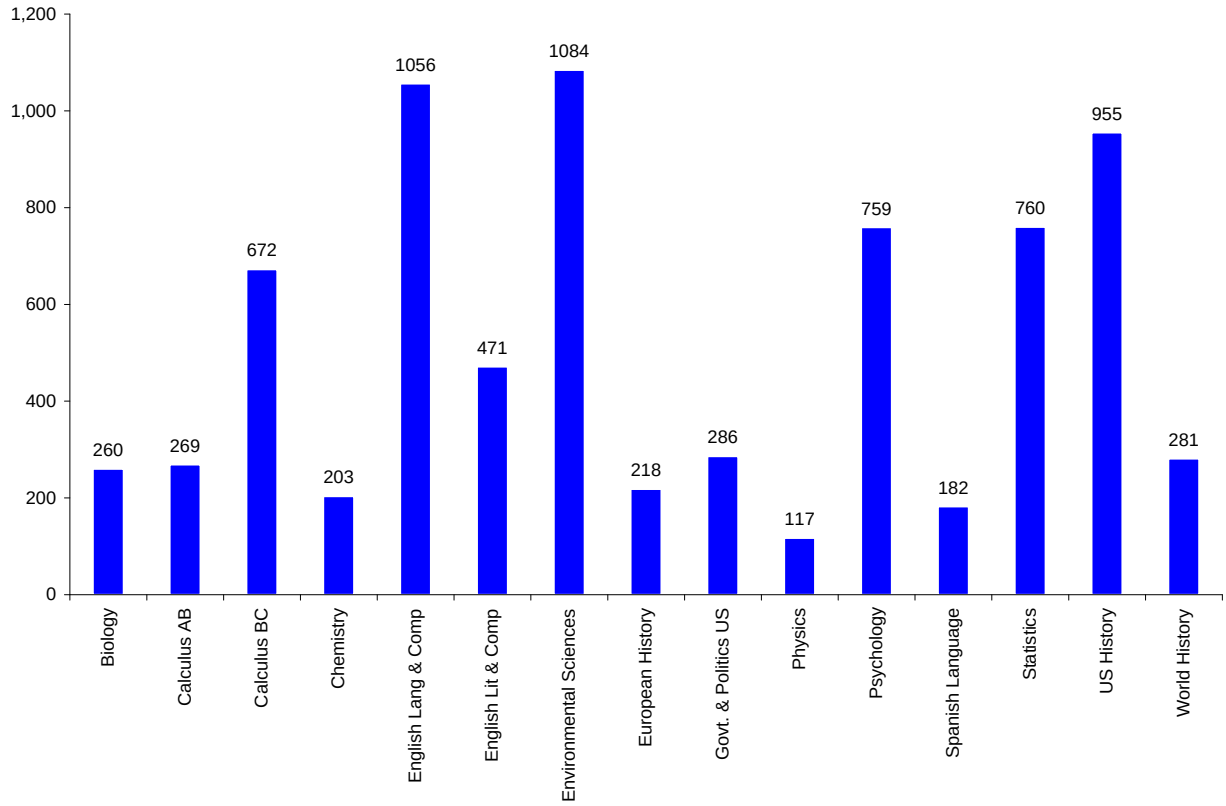
Figure 15
Number of AP Exams Taken, 1997-2007



Data Source: S:\Data Folders\Assessment Test results\Advanced Placement\2006-07\Summary AP results by School 2006-07.xls Printed reports from the North Carolina College Board.
Interpretation Example: Students in WCPSS took 8,205 AP exams in 2006-07, an increase of 1,029 since 2005-06.

Among the available exams, the most commonly taken exams are listed in Figure 16. English Language and Composition, Environmental Science, and U.S. History were the most popular AP exams taken in 2006-07. This pattern has been largely consistent in WCPSS since 2003-04 (Wake County Public Schools, 2006).

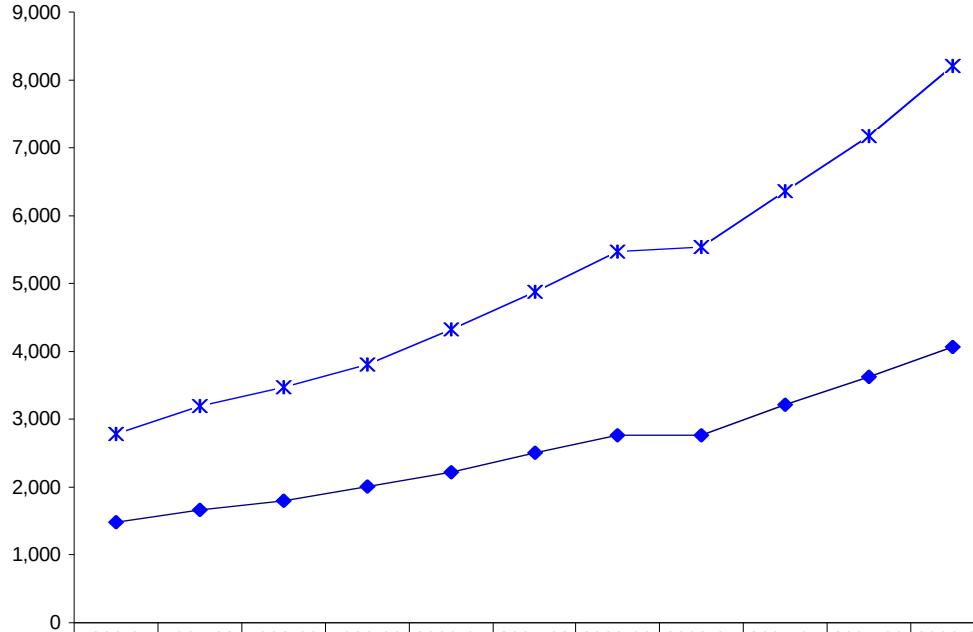
Figure 16
AP Exams Taken by Course, 2006-07



Interpretation Example: Students in WCPSS took 1,056 exams for English Language and Composition during the 2006-07 school year.

As was true for AP enrollments, students often take more than one AP exam in a given year. Figure 17 shows that over the past several years, the number of unique students taking AP exams has increased proportionally along with the number of exams taken. In general, the number of unique students taking AP tests has been about one half the number of tests taken. In other words, the average number of AP tests taken in a given year is about two per student.

Figure 17
Number of AP Test Takers and Number of AP Tests Taken, 1997-2007



	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
# Students Taking Exams	1,480	1,663	1,798	2,004	2,223	2,506	2,766	2,768	3,212	3,621	4,068
# Exams Taken	2,785	3,197	3,471	3,806	4,320	4,878	5,468	5,534	6,365	7,176	8,205

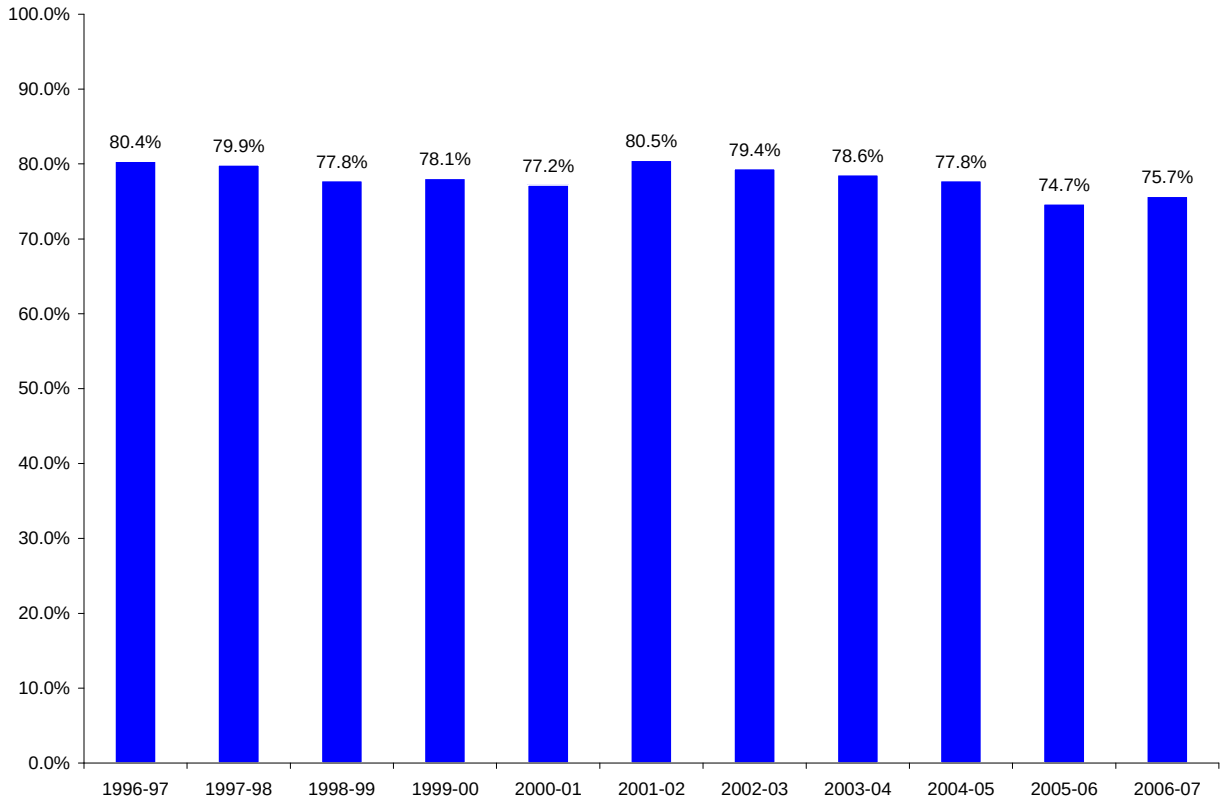
Interpretation Example: In 2006-07, 4,068 students took 8,205 AP exams in Wake County schools an average of a little more than two exams per student.

AP Exam Performance

Scores on AP exams range from 1 to 5, and many colleges and universities award course credit for a score of 3 or higher. According to the College Board, an AP exam score of 3 or higher indicates sufficient mastery of course content to grant a student exemption from a college course, credit, or both (College Board, 2006). Thus, one common measure of performance on AP exams is the percentage of exams with a score of 3 or higher.

About three quarters of WCPSS students earned a score of 3 or higher in 2006-07. The percentage of WCPSS AP exam scores of 3 or higher increased slightly this year after several years of small declines (Figure 18). Although this is encouraging, any trend information on overall AP exam performance should be interpreted cautiously. The fluctuations could have been a function of the pool of students taking AP exams over time or the fact that new AP exams have been introduced over the years, which could have been more (or less) difficult.

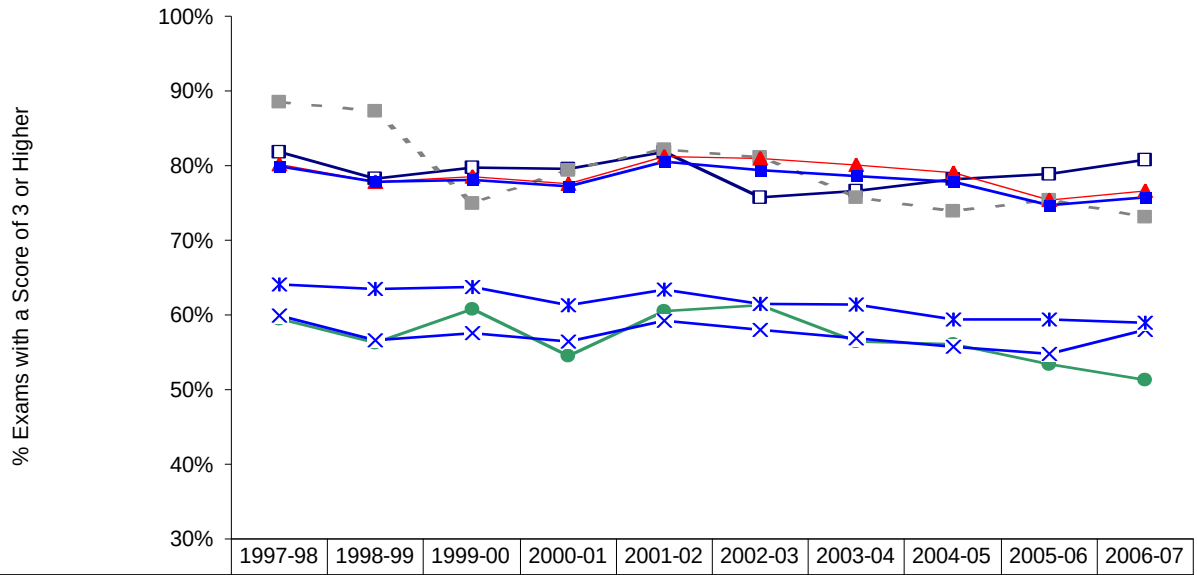
Figure 18
Percent of WCPSS AP Exam Scores of 3 or Higher, 1997-2007



Interpretation Example: 75.7% of exams taken in 2006-07 had an achievement score of 3 or higher, an increase of 1% from the previous year.

WCPSS results on the AP exams are considerably better than in North Carolina or the nation overall. This is also true for White, Asian, and Hispanic/Latino WCPSS ethnic groups. The one exception is Black/African American students, who earn scores of 3 or better at a lower rate than North Carolina and U.S. AP test takers overall (Figure 19). Hispanic/Latino and Black/African American students' performance on AP exams have declined over the past nine years more than the White and Asian subgroups.

Figure 19
AP Exam Performance by Ethnicity, 1998-2007

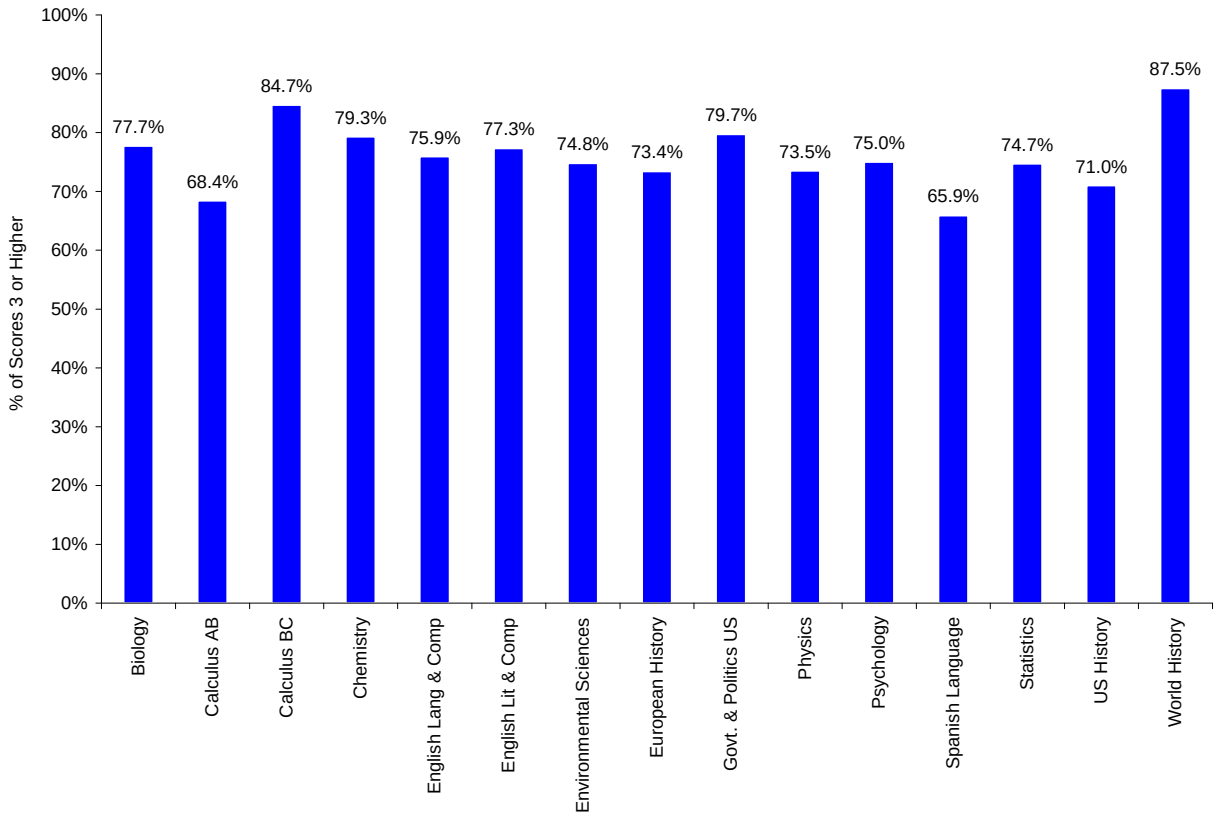


	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Asian	81.8%	78.3%	79.7%	79.6%	81.8%	75.7%	76.6%	78.2%	78.9%	80.8%
Black	59.5%	56.3%	60.8%	54.5%	60.5%	61.3%	56.4%	56.1%	53.4%	51.3%
Hispanic/Latino	88.5%	87.3%	75.0%	79.4%	82.2%	81.1%	75.7%	73.9%	75.4%	73.1%
White	80.2%	77.8%	78.5%	77.6%	81.2%	81.0%	80.1%	79.1%	75.4%	76.6%
WCPSS	79.9%	77.8%	78.1%	77.2%	80.5%	79.4%	78.6%	77.8%	74.7%	75.7%
NC	59.9%	56.6%	57.6%	56.4%	59.2%	58.0%	56.9%	55.7%	54.8%	58.0%
US	64.1%	63.5%	63.7%	61.3%	63.4%	61.5%	61.4%	59.4%	59.4%	59.0%

Interpretation Example: The percentage of exams with a score of 3 or higher for White students has been above 74% since 1997-98.

AP exam performance also varies by course, see Figure 20. Differences in relative difficulty of tests, as well as differences in the proportion of students who actually decide to take the exam, are two factors that likely contribute to the difference in performance across tests. Among the 15 most commonly taken AP exams in 2006-07, the highest passing rates (over 84%) were in Calculus BC and World History. Historically, passing rates across individual exams have fluctuated from year to year (Wake County Public Schools, 2006).

Figure 20
AP Exam Performance by Course, 2006-07



Interpretation Example: The highest percentage of scores of 3 or higher for an AP exam in 2006-07 was for World History (87.5%).

HIGH SCHOOL END-OF-COURSE (EOC) RESULTS

The North Carolina Department of Public Instruction (NCDPI) requires that all schools administer multiple-choice EOC tests to students enrolled in ten courses usually taken in high school. The tests are aligned with the Standard Course of Study in each of the subjects tested (Algebra I, Algebra II, Geometry, English I, Biology, Chemistry, Physical Science, Physics, U. S. History and Civics & Economics) and use a multiple-choice format. New EOC tests were administered in Algebra I, Algebra II, Geometry, and English I in 2006-07. This was the second year of using new EOC tests in U.S. History and Civics & Economics. Under the state's ABCs of Public Education accountability program, EOC tests must be given during the last two weeks of the course. Results are then used for state accountability programs. In addition, students who started high school in 2006-07 or later must now pass the EOCs in five required courses (Algebra I, English I, Biology, U.S. History, and Civics and Economics) to graduate (retest opportunities are provided and waiver committees meet to review cases where students do not pass). For more information, see the Graduation Rate section of this report.

Student performance on EOC multiple-choice tests is measured by both a scale score and an achievement level. There are four broad achievement levels, each representing a different level of competency in a subject area (Table 8). Table 9 shows the range of scale scores associated with each achievement level for each of the seven EOC tests administered in 2006-07. Curriculum is reviewed and revised in each course every five years. Cut scores are adjusted as well when tests are revised, and the trend has been for the proficiency standards to be made more difficult to reach. Some courses were revised considerably during the last cycle, such as U.S. History, resulting in considerable change to the tests as well.

Although most EOC tests are taken by students in grades 9-12, a growing number of middle school students are taking higher-level mathematics courses prior to enrolling in high school in recent years. Due to this trend, some students may take Algebra I, Geometry, or even Algebra II tests in middle school. The results reported in this section contain test results for students in grades 9-12 only unless otherwise specified.

Table 8
Basic Description of 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 actually vary by course and are listed in NC State Board of Education Policy HSP-C-010 (http://sbepolicy.dpi.state.nc.us/policies/HSP-C-010.asp?pri=01&cat=C&pol=010&acr=HSP)

Table 9
EOC Achievement Levels by Scale Score Ranges, 2006-07

	Level I	Level II	Level III	Level IV
Algebra I	Up to 139	140-147	148-157	158 and up
Algebra II	Up to 138	139-146	147-157	158 and up
Biology	28-46	47-54	55-64	65-85
English I	Up to 137	138-145	146-156	157 and up
Geometry	Up to 138	139-147	148-157	158 and up
U. S. History	Up to 139	140-148	149-159	160 and up
Civics & Economics	Up to 140	141-147	148-159	160 and up

Note: 1. As tests are revised, they are being moved to a 100 to 200 scale.
2. Chemistry, Physics, and Physical Science were field tests in 2006-07

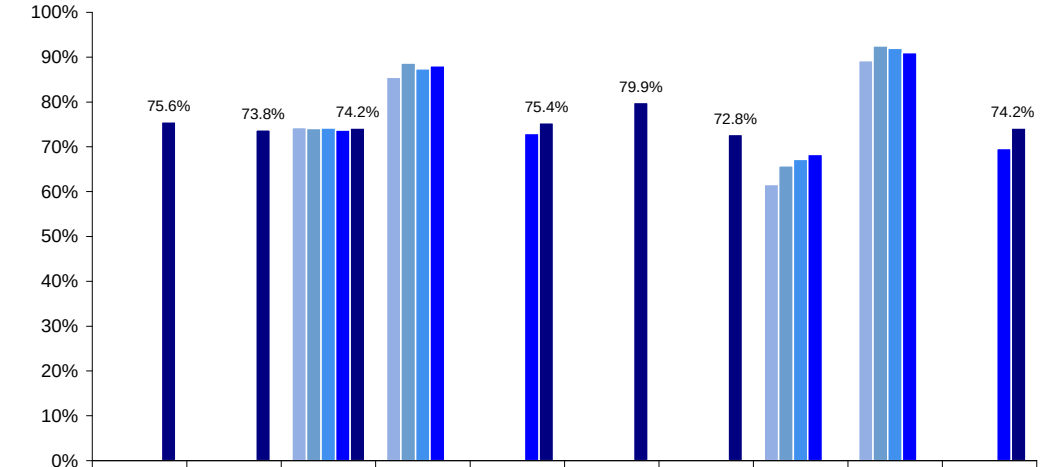
In addition to being differentiated by subject area, EOC tests are also sometimes categorized as either "core" or "elective." The five core EOCs – Algebra I, English I, Biology, U.S. History, and Civics & Economics – are taken by the vast majority of high school students. Beginning with the incoming 9th-grade class of 2006-07, students statewide have to meet proficiency requirements on each of those five tests in order to graduate from high school. The remaining five EOCs – Algebra II, Geometry, Physical Science, Chemistry, and Physics – can be thought of as elective EOCs because those courses are not explicitly required for graduation, and therefore not all students will take them.

When taking stock of EOC test performance, several contextual factors need to be considered. While the five core EOCs are taken by the vast majority of high school students, the elective EOCs are taken by a less representative population of students. Higher-level math and science EOCs are less likely to include students who struggle academically, as they are not as likely to enroll in those courses in the first place, particularly physics. On the other hand, those students

are more likely than others to enroll in physical science. Therefore, the performance of students on those elective EOC tests is not always representative of the entire high school population.

Figure 21 illustrates proficiency results on EOCs since 2002-03. Only the most recent official test versions are reflected. Results were not available for Chemistry, Physical Science, or Physics in 2006-07, since new tests were only field tested last spring. For all the tests revised in the last two years, proficiency rates were between 72.8% and 79.9%, regardless of whether tests were required or for elective courses. Proficiency rates were up slightly in Civics and Economics (C&E) and U.S. History, which were given for the second year. However, interim cut scores were also adjusted when they became permanent this year, which could also have contributed to the improvement.

Figure 21
WCPSS End-of-Course (EOC) Proficiency Rates, 2003-2007



	Algebra I	Algebra II	Biology	Chemistry	Civics & Economics	English I	Geometry	Physical Science	Physics	U.S.History
2002-03			74.3%	85.5%				61.6%	89.2%	
2003-04			74.1%	88.7%				65.8%	92.5%	
2004-05			74.2%	87.4%				67.2%	92.0%	
2005-06			73.7%	88.1%	73.0%			68.3%	91.0%	69.6%
2006-07	75.6%	73.8%	74.2%		75.4%	79.9%	72.8%			74.2%

Note: The number of bars shown indicates the number of years the most current version of the test has been given. Chemistry and Physical Science and Physics were field tested in 2006-07, and results are therefore not available.

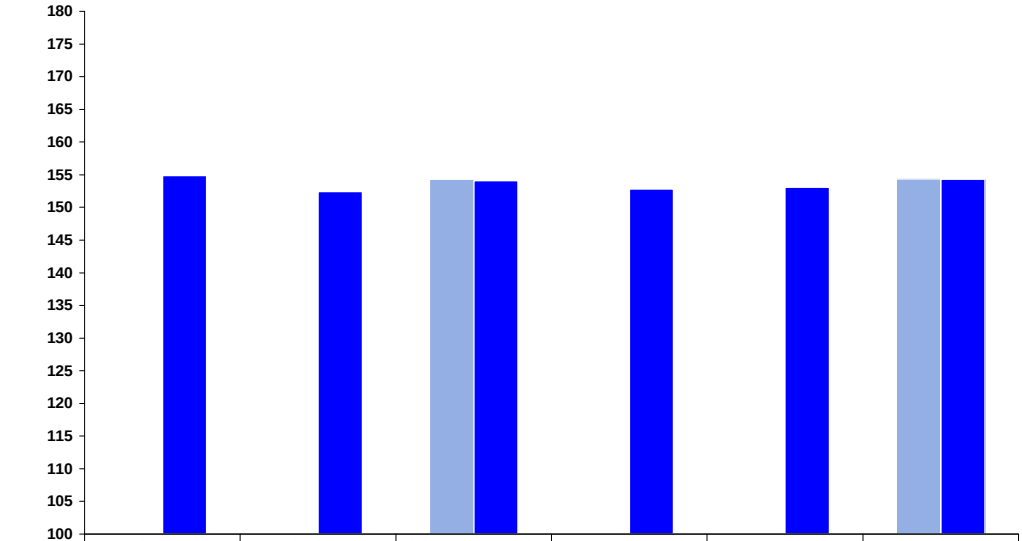
Interpretation Example: The percentage of students scoring high enough on the Biology EOC to be considered proficient has fluctuated very little over the last five years, ranging from 73.7 to 74.3%.

The fact that passing EOCs in the five core courses is now a graduation standard for those who entered grade 9 in 2006-07 or later makes proficiency of even greater importance.

Combining proficiency results across all required EOC tests is one way to gauge the extent to which these standards are being met. The percentage of required EOCs passed was 75.9%. On the other hand, 1 in 4 tests taken is not passed, a considerable number given implications for graduation and remediation.

In addition to looking at the percentage of students who score proficient on EOC tests, monitoring the change in the average test score is another useful metric for assessing progress. As Figure 22 illustrates, all average scale scores ranged from 152 to 155. These scores are in the middle of Level 3 (see Table 9). It is interesting to note that scale scores in U.S. History and C&E changed very little, even though proficiency increased in both areas. Proficiency increases were the result of adjustments to the standards this year. Biology is on a different scale since standards have not yet been revised; average scale scores have averaged about 60 for the last five years.

Figure 22
WCPSS End-of-Course Average Scale Scores, 2005-06 to 2006-07

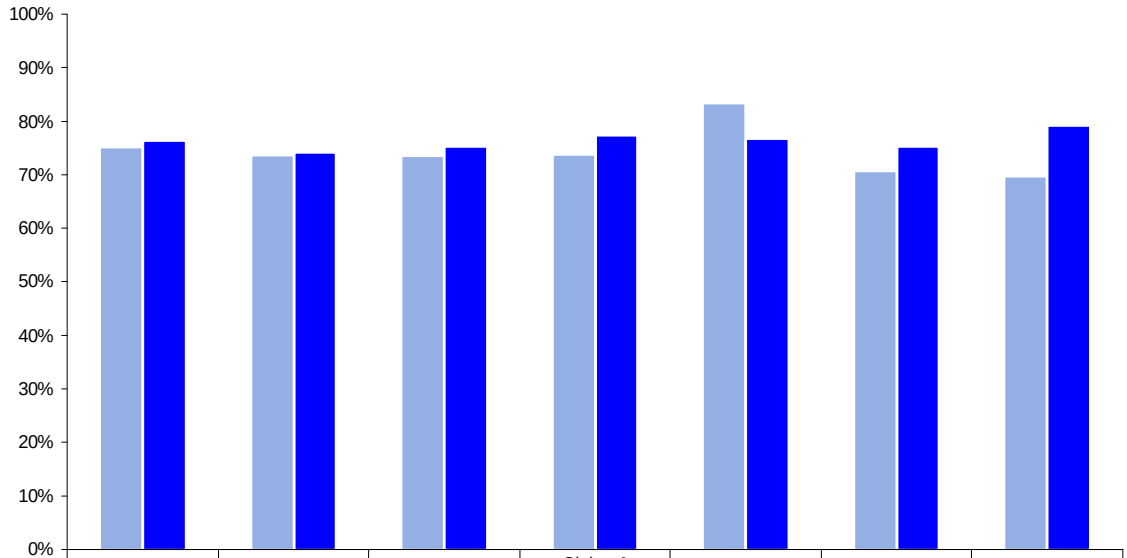


	Algebra I	Algebra II	Civics & Economics	English I	Geometry	U.S.History
2005-06			154.3			154.4
2006-07	154.9	152.4	154.1	152.8	153.1	154.3

EOC Results by Gender

When looking separately at EOC proficiency results for male and female students, some interesting patterns appear. In particular, male students outperformed females in 2006-07 on every EOC test except English I (see Figure 23). The largest gap was in U.S. History (9.5 percentage points). On the other hand, 6.7% more female students scored proficient in English I than male students.

Figure 23
EOC Proficiency by Test and Gender, 2006-07



	Algebra I	Algebra II	Biology	Civics & Economics	English I	Geometry	U.S.History
Female	75.0%	73.6%	73.4%	73.7%	83.3%	70.6%	69.6%
Male	76.2%	74.0%	75.1%	77.2%	76.6%	75.2%	79.1%

EOC Results by NCLB Subgroups

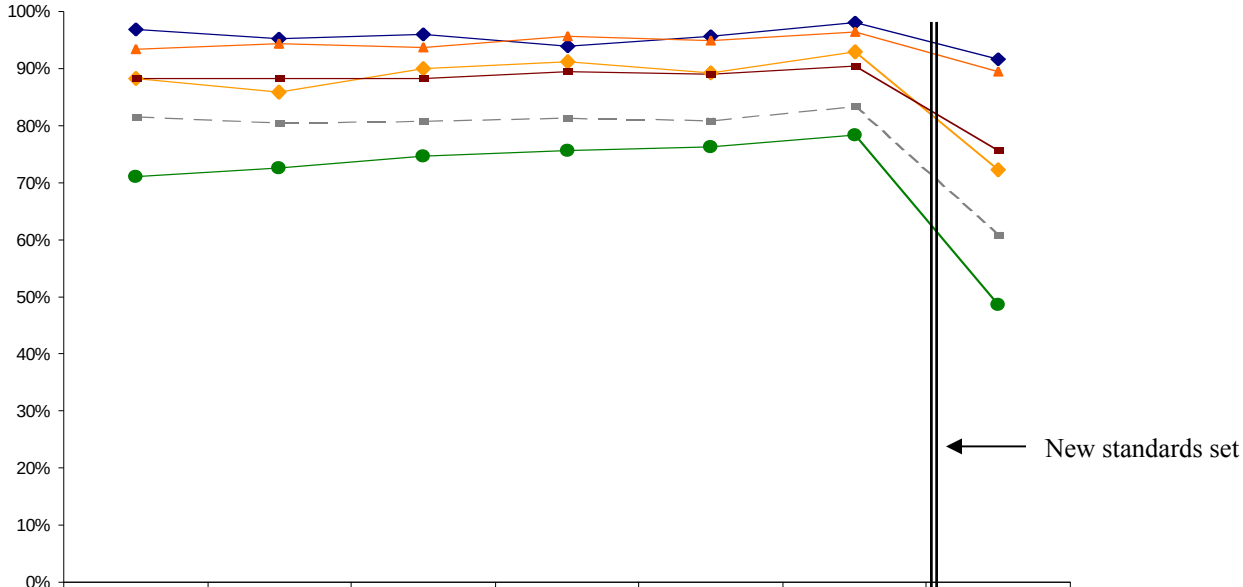
WCPSS has been providing ethnic subgroup comparisons for many years to aid school and system improvement efforts. With the advent of the No Child Left Behind Act of 2001 and the subsequent retooling of the state's testing and accountability system, more subgroups have come under increased scrutiny. Through the Adequate Yearly Progress mechanism of that law, schools are now held directly responsible for the performance of not just the school as a whole, but also for the performance of students in various ethnic groups as well as students with disabilities (SWD), students eligible for free or reduced-price lunch (FRL), and students with limited English proficiency (LEP). Therefore, analysis of EOC results of these various subgroups of students gives a finer-grained picture of school performance beyond those presented above.

The following graphs (Figures 24-29) provide a breakdown of EOC performance by ethnicity for the five core EOC tests over the past several years. Data for certain subgroups (Multiracial and American Indian students in particular) and certain tests must be interpreted carefully due to small numbers of test takers. Results based on small numbers of students are likely to fluctuate more dramatically from year to year.

Algebra I

Proficiency percentages for all middle and high school students in Algebra I had shown small improvements for all ethnic groups between 2000-01 and 2005-06 (Figure 24). However, declines were evident for all subgroups in 2006-07 with the new test and standards. Algebra I had the smallest gaps in achievement between ethnic subgroups prior to 2006-07, but the new test and standards resulted in a widening of achievement gaps. The gap between Black/African American and White students increased from 18 percentage points in 2005-06 to nearly 41 percentage points in 2006-07.

Figure 24
Algebra I Proficiency by Ethnicity, 2001-2007

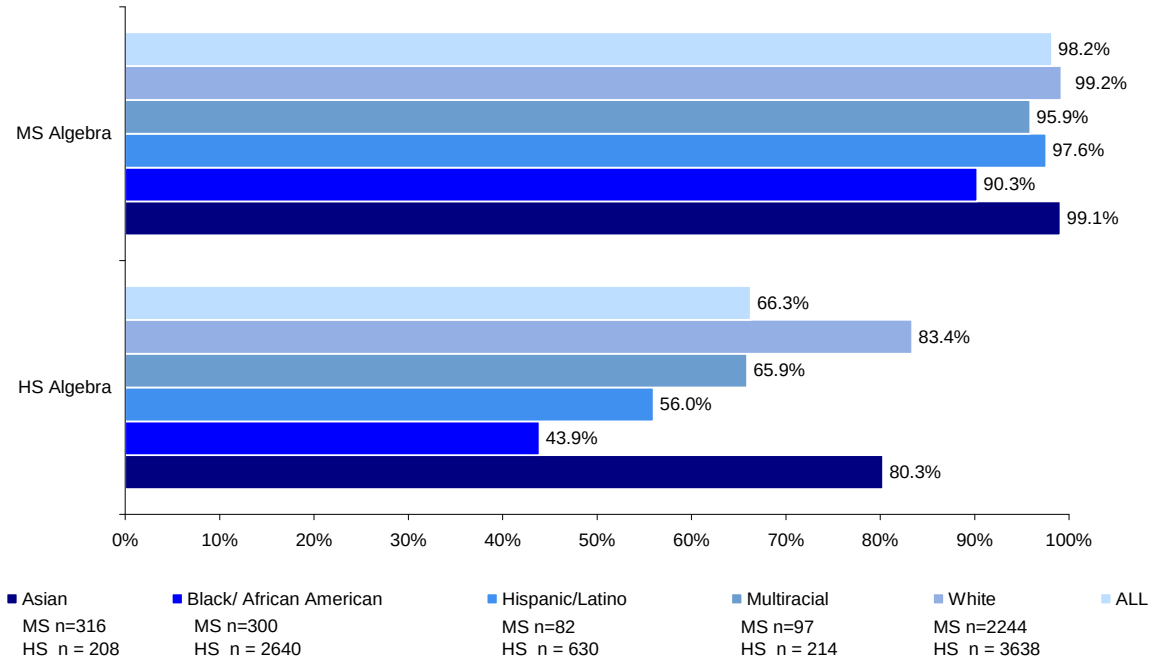


	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Asian	96.8%	95.2%	96.0%	93.9%	95.7%	98.0%	91.6%
Black	71.1%	72.6%	74.6%	75.6%	76.3%	78.3%	48.6%
Hispanic/Latino	81.5%	80.4%	80.7%	81.3%	80.9%	83.4%	60.8%
Multiracial	88.2%	85.9%	90.0%	91.2%	89.2%	92.9%	72.2%
White	93.4%	94.3%	93.7%	95.6%	94.9%	96.4%	89.4%
All Students	88.3%	88.3%	88.3%	89.4%	89.0%	90.4%	75.6%

Note: Includes all test takers (middle and high school students).

Algebra I performance is also affected by the fact that students may take Algebra I as early as 6th grade, or as late as 12th grade. Overall, 29% of 2006-07 middle school students took Algebra I. As shown in Figure 25, the performance profile of those students is very different from those who wait until high school to take Algebra. As more students take Algebra in middle school, it is likely that the performance of high school students as a group may decline, as the more academically advanced students are the ones who are taking Algebra in middle school. Ethnic gaps are not evident among those students who take Algebra I in middle school, but they are quite distinct among those taking Algebra in high school.

Figure 25
Algebra I Proficiency by Ethnicity and Grade Span, 2007

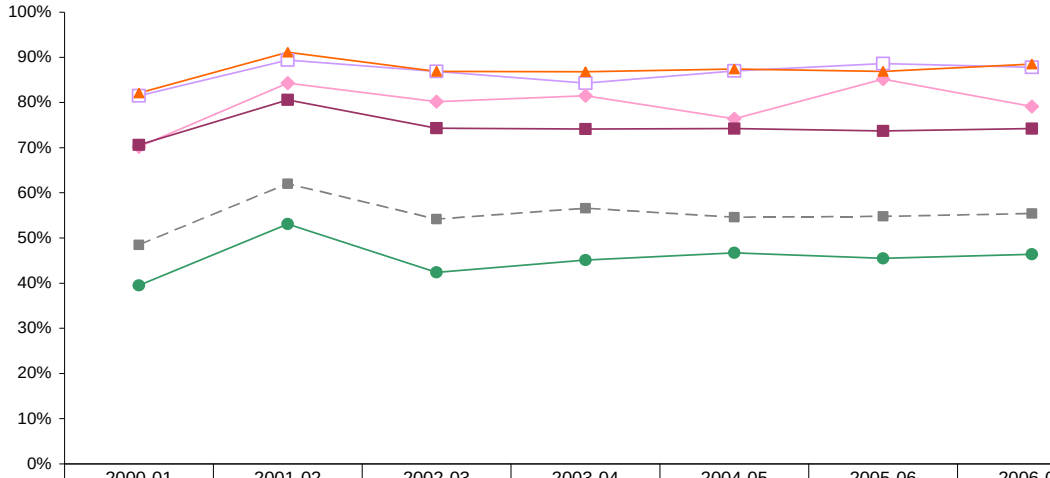


Notes:
1. Middle School (MS) N = 3,043
2. High School (HS) *N* = 7,344
3. American Indian not shown because of small number tested (14 at high school and 4 at middle school)

Biology

As with Algebra I, between 2000-01 and 2005-06, the percentages of students scoring proficient in Biology increased for every ethnic group (Figure 26). Between 2005-06 and 2006-07, the pattern was more mixed, with Asian and Multiracial students showing slight decreases in proficiency rates and Black/African American, Hispanic/Latino, and White students showing small increases. Despite these increases, proficiency rates for both Black/African American and Hispanic/Latino students in 2006-07 remained relatively low, compared to other ethnic groups and compared to other EOC tests. Prior to 2006-07, Biology had been the subject with the largest proficiency gaps between ethnic groups among all of the EOCs.

Figure 26
Biology Proficiency by Ethnicity, 2001-2007

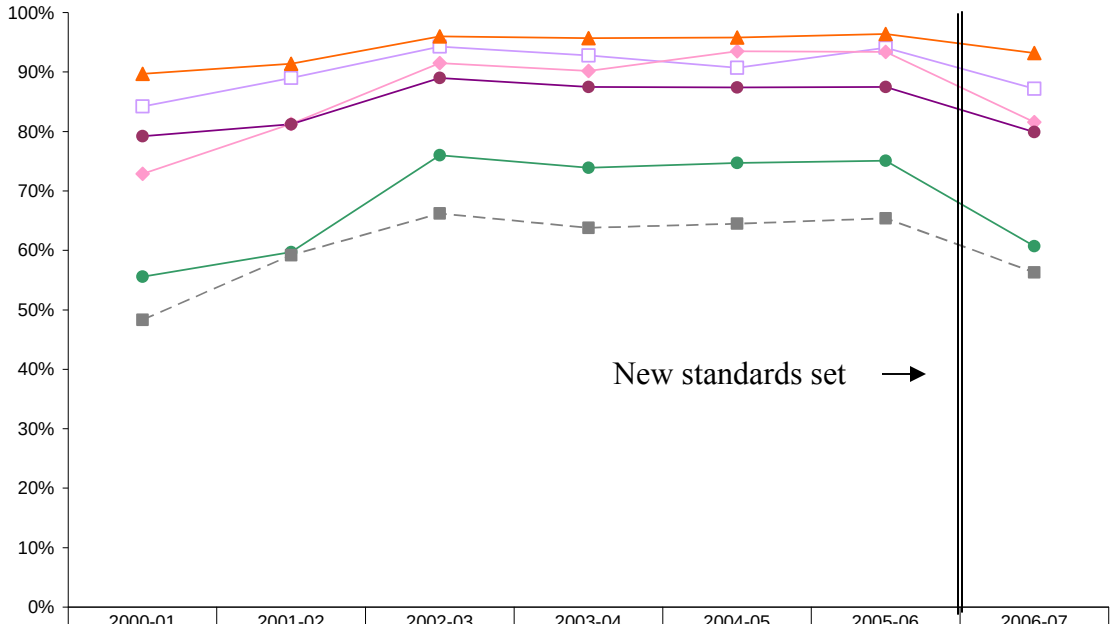


	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Asian	81.5%	89.4%	86.9%	84.3%	87.0%	88.6%	87.8%
Black	39.5%	53.1%	42.4%	45.1%	46.7%	45.5%	46.4%
Hisp./Latino	48.5%	62.0%	54.2%	56.6%	54.6%	54.8%	55.4%
Multiracial	70.2%	84.3%	80.2%	81.5%	76.4%	85.2%	79.1%
White	82.1%	91.1%	86.9%	86.8%	87.4%	86.9%	88.5%
All Students	70.6%	80.6%	74.3%	74.1%	74.2%	73.7%	74.2%

English I

Proficiency rates for English I showed a steady pattern of improvement for most ethnic groups as well between 2000-01 and 2005-06 and the most significant closing of the performance gap between White and other students (Figure 27). In 2006-07, when the new test was introduced, proficiency rates decreased for all ethnic subgroups, with White and Asian students showing smaller decreases than Black/African American and Hispanic/Latino students. This resulted in larger achievement gaps. The largest gap is between White and Hispanic/Latino students at 36.9 percentage points.

Figure 27
English I Proficiency by Ethnicity, 2001-2007

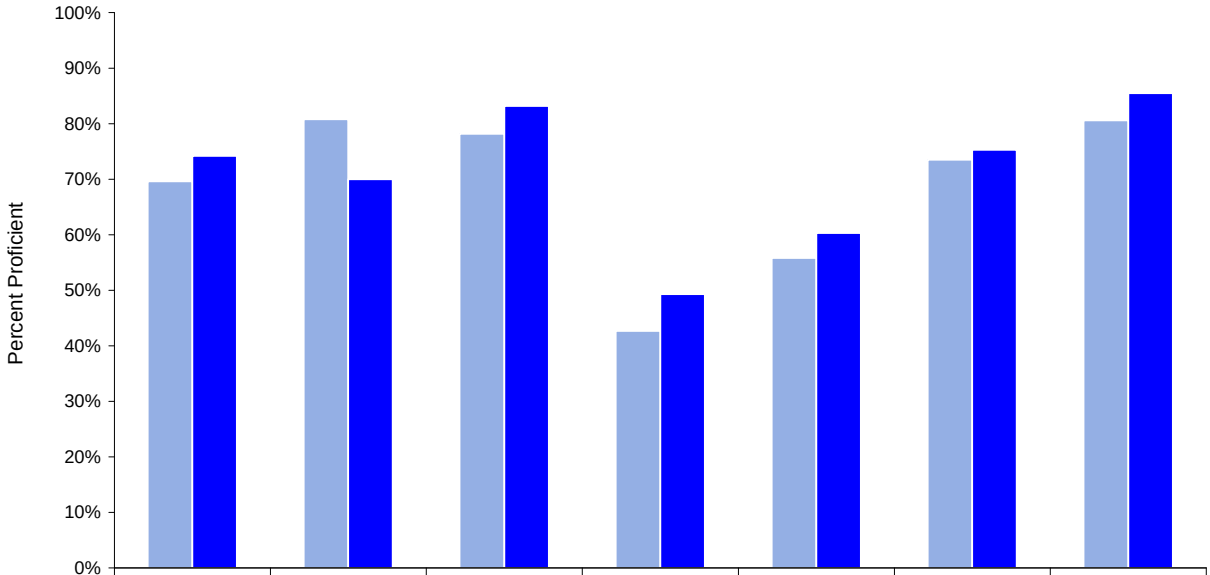


	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Asian	84.2%	89.0%	94.3%	92.8%	90.7%	94.1%	87.2%
Black	55.6%	59.7%	76.0%	73.9%	74.7%	75.1%	60.7%
Hisp./Latino	48.3%	59.2%	66.2%	63.8%	64.5%	65.4%	56.3%
Multiracial	72.9%	81.3%	91.5%	90.2%	93.5%	93.4%	81.6%
White	89.7%	91.4%	96.0%	95.7%	95.8%	96.4%	93.2%
All Students	79.2%	81.2%	89.0%	87.5%	87.4%	87.5%	79.9%

U S. History and Civics & Economics

Proficiency rates in U.S. History increased between 2005-06 and 2006-07, which likely reflects a combination of improved student performance and adjusted Level III proficiency standards (Figure 28). All subgroups improved except American Indian students (a small group, making scores more subject to fluctuation). The largest proficiency gap was between White and Black/African-American students on the U.S. History in 2006-07 was 36.2 percentage points. Just less than half of the Black/African American students scored proficient in U.S. History.

Figure 28
U.S. History Proficiency by Ethnicity, 2005-06 to 2006-07

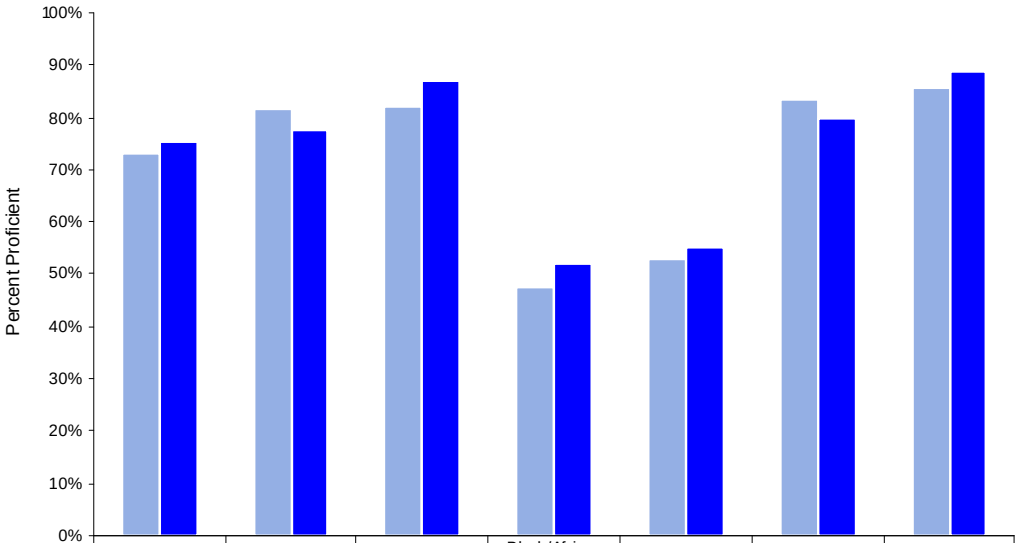


	All Students	American Indian	Asian	Black/African American	Hispanic/Latino	Multiracial	White
2005-06	69.6%	80.8%	78.2%	42.7%	55.8%	73.5%	80.6%
2006-07	74.2%	70.0%	83.2%	49.3%	60.3%	75.3%	85.5%

Interpretation Example: The percentage of Black/African American students scoring proficient in U.S. History in WCPSS increased from 42.7% to 49.3% between 2005-06 and 2006-07.

Proficiency rates in Civics and Economics increased two percentage points between 2005-06 and 2006-07 (slightly less than in U.S. History), which likely reflects a combination of improved student performance and adjusted Level III proficiency standards (Figure 29). All ethnic groups improved except American Indian and Multiracial students, the smallest of the groups. The largest proficiency gap was between White and Black/African-American students (33.6 percentage points). Just over half of Black/African American and Hispanic/Latino students scored proficient in Civics and Economics in 2006-07.

Figure 29
Civics & Economics Proficiency by Ethnicity, 2005-06 to 2006-07



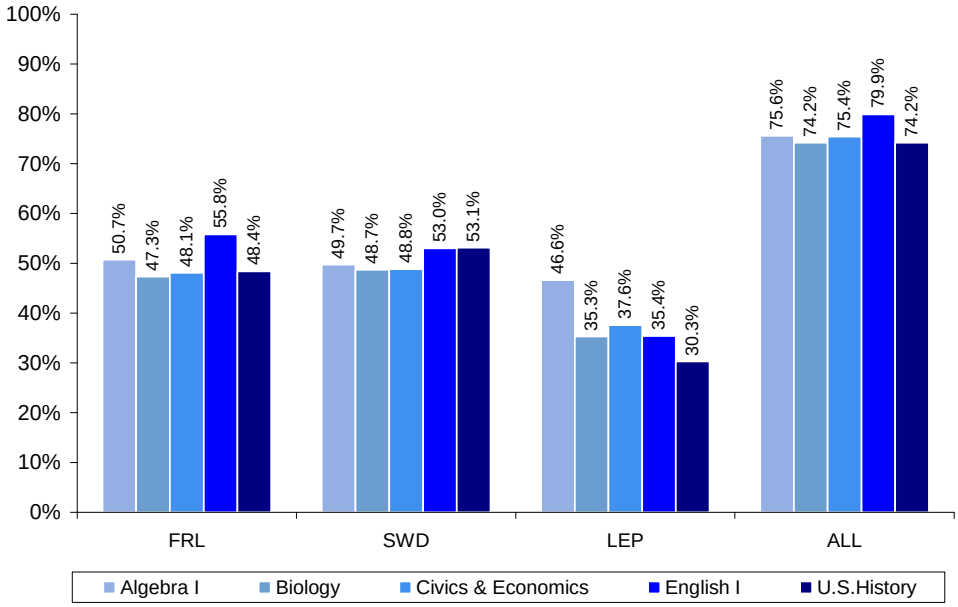
	All Students	American Indian	Asian	Black/African American	Hispanic/Latino	Multiracial	White
2005-06	73.0%	81.8%	81.9%	47.3%	52.9%	83.3%	85.7%
2006-07	75.4%	77.4%	87.1%	51.9%	54.9%	79.9%	88.5%

Performance of SWD, FRL and LEP Students

Historically, performance of SWD, FRL and LEP students on standardized educational tests of any kind has largely lagged behind the performance of students who are not classified as such. On the five core EOC tests administered in WCPSS in 2006-07, this pattern is evident (Figure 30). Across all five tests, the performance of SWD, FRL, and LEP students in terms of the percentage of students scoring proficient lagged considerably behind the systemwide percentage.

- Gaps are larger and more uniform than before EOC standards were revised.
- LEP students show the lowest performance on all of the required EOC tests, with their highest proficiency percentage in Algebra I.
- FRL students tend to show slightly higher proficiency rates in English I than on the other tests.
- SWD students fare slightly better on proficiency rates in English I and U.S. History than on the other required EOC tests.

Figure 30
Performance of Academic Risk Factor Subgroups
on the Five Required EOC Tests, 2007



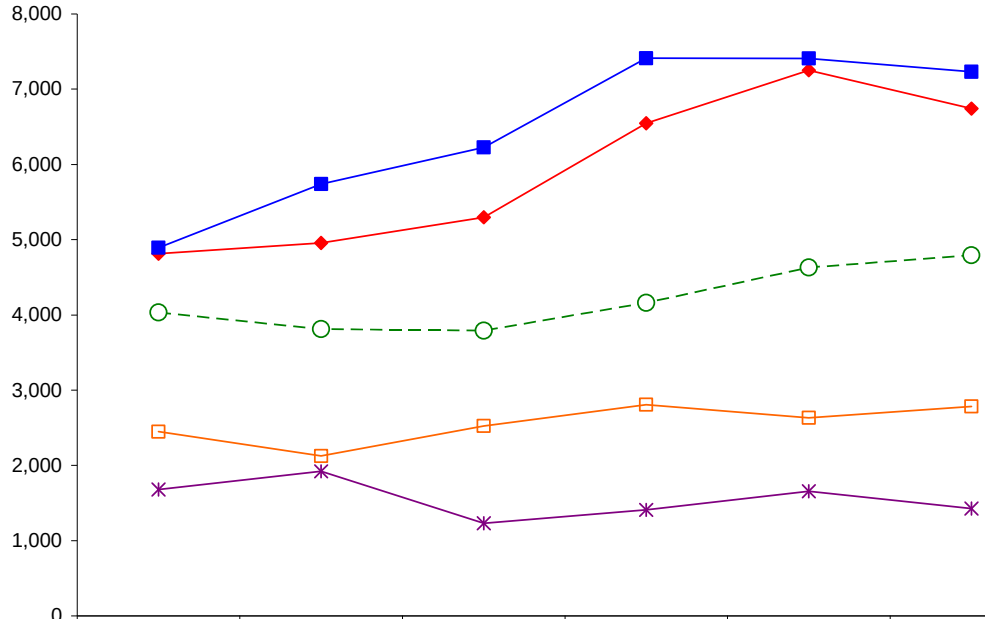
Additional Information on Elective EOC Courses

When taking stock of EOC test performance for elective courses, it is important to remember that they are taken by a less representative population of students. Higher-level math and science EOCs are less likely to include students who struggle academically, particularly in Physics. On the other hand, those students are more likely than others to enroll in Physical Science.

When examining performance on elective EOC tests, trends in scores can also be affected by changes over time in the number and nature of the students who choose to enroll in those courses. Figure 31 displays the number of tests given over the past several years in each of those five areas, which can be considered a proxy for course enrollment. Since 2000-01, the number of students taking elective tests with EOCs has increased overall, with Geometry having the largest increases (see Figure 31). Physics is the only course area that has had fewer students enrolled over time. Overall growth in enrollment can be explained by growth in enrollment except for Geometry (see the Demographic Trends section of this report).

Information for 2006-07 is limited to Algebra II and Geometry, because only field tests were given in 2006-07 in the science areas (see note below Figure 31). In these courses, the number of tests taken increased by 438 students in Algebra II and 651 in Geometry. These increases were slightly greater than the increase in high school enrollment overall (see Demographics section).

Figure 31
Participation in Elective EOC Tests, 2001-2007*



	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Algebra II	4,814	4,956	5,296	6,548	7,251	6,741
Chemistry	4,034	3,811	3,792	4,162	4,630	4,795
Geometry	4,892	5,741	6,225	7,412	7,409	7,231
Physical Science	2,449	2,125	2,525	2,808	2,632	2,785
Physics	1,680	1,922	1,231	1,409	1,657	1,426

Note: *2006-07: Algebra II n = 7,179 and Geometry n = 7,882
Science areas were field tests.

Summary

In general, the performance of WCPSS students on EOC tests in recent years shows the impact of more rigorous standards as courses and tests were revised. Slight improvements were evident in 2006-07 in tests revised in 2005-06. However, compared to the old standards, overall proficiency rates are still considerably lower and larger achievement gaps between student subgroups are evident. Increased standards for these tests, coinciding with the five core EOCs being required for graduation (beginning with first-time 9th graders in 2006-07) make EOC performance increasingly important, especially for minority students and those with academic risk factors.

The 2007-08 school year will also witness a resetting of achievement standards on five EOC tests (the four science tests and Algebra II), the effects of which are yet to be known. However, past examples of standard setting on new or revised state tests suggest that a drop in proficiency rates is very likely across those eight EOCs. Future versions of this report will examine those potential changes and their impact.

GRADE 10 WRITING ASSESSMENT

North Carolina began its statewide writing assessment in the 1983-84 school year with tests administered to students in grades 6 and 9. From the beginning, the North Carolina Writing Assessment emphasized student composition skills, and scoring rubrics were designed to holistically assess students' abilities to create good written compositions in standardized single session testing environments. In 1995-96, testing shifted to grades 4, 7, and 10. In 2001, the North Carolina Department of Public Instruction (NCDPI) staff began a process that resulted in new writing assessments and scoring procedures for grades 4, 7, and 10. The new procedures were approved by the State Board of Education (SBE) on January 9, 2003, and statewide pilot testing occurred in March 2003.

NC Writing Assessment Scoring Procedures

New administration and scoring procedures for the writing assessment went into effect during the 2002-03 school year. Scoring was significantly different from the model previously used. Therefore, comparisons to previous years are inappropriate. As in previous years, two individual readers evaluated content (focus, organization, support and elaboration, and style). However, beginning in 2002-03, readers also rated the convention (sentence formation, usage, and mechanics) displayed in the writing sample. Each reader gave a content score from 1 to 4 or a no score (NS) for essays that were off topic and could not be evaluated. A conventions score ranging from 0 to 2 was also given by each reader.

The major change in scoring procedures incorporated the conventions score into the total writing score for each student. The total writing score is computed by combining the content scores and the conventions scores from both scorers using the following equation:

> The Total Writing Score = (the sum of the content scores from the two independent readers multiplied by 2) plus (the sum of the conventions scores from the two readers).

The new scoring method results in student scores ranging from a low of 4 (in a case where both readers gave content scores of 1 and conventions scores of 0) to a high of 20 (where both content scores are 4 and both conventions scores are 2).

As is true for most other North Carolina state tests, total scores from the writing test are distributed into four achievement levels (I, II, III, and IV). The level definitions are similar to those used for End-of-Grade (EOG) and End-of-Course (EOC) testing. Level I scores are considered far below grade level, Level II slightly below grade level, Level III at grade level, and Level IV well above grade level (Table 10). Prior to 2003, conventions ratings were not part of the total writing score, and the content scores of two readers were averaged, resulting in final scores ranging from 1.0 to 4.0.

Table 10
Writing Test Total Score Ranges by Level

Level I	4-7
Level II	8-11
Level III	12-16
Level IV	17-20

Types of Writing

Writing scores tend to fluctuate from year to year based, at least in part, upon the type of writing and subject matter of the prompt. Based upon the recommendations of the North Carolina Writing Assessment Task Force and the State Board of Education Ad Hoc Writing Committee, the grade 4 prompt currently takes the form of a personal narrative or imaginative narrative. The grade 7 prompt requires an extended argumentative response, and the grade 10 prompt asks students for an extended informational response either in the form of a definition or a cause/effect relationship. Figure 32 shows the prompt utilized by NCDPI for the 2006-07 writing assessments at grade 10.

Figure 32
10th Grade Writing Prompt Used in the 2006-07 School Year

Students in the tenth grade who participated in the General Writing Assessment were asked to write a definition response to the following informational prompt:

Write an article for a school newspaper about the meaning of human rights (rights that should be given to all people simply because they are human). You may use the following information, your own experiences, observations, and/or readings.

Right: That which is just, legal, morally good, or appropriate.
Source: Webster's II New College Dictionary

Article 1
All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.
Article 2
Everyone is entitled to all the rights and freedoms set forth in the Declaration, without distinction of any kind, such as race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.
Article 3
Everyone has the right to life, liberty, and security of person.
Source: Universal Declaration of Human Rights: The First Three Articles

This must be a world of democracy and respect for human rights, a world freed from the horrors of poverty, hunger, deprivation and ignorance, relieved of the threat and the scourge of civil wars and external aggression and unburdened of the great tragedy of millions forced to become refugees.
The normal condition for human existence is democracy, justice, peace, non-racism, non-sexism, prosperity for everybody, a healthy environment and quality and solidarity among the peoples.
Source: Nelson Mandela, Nobel Peace Prize Address

While comparisons of the percentages of students at each achievement level can be made to previous years, it must be remembered that different prompts are used each year, the group of students taking the test changes each year, and students may find some prompts more difficult than others.

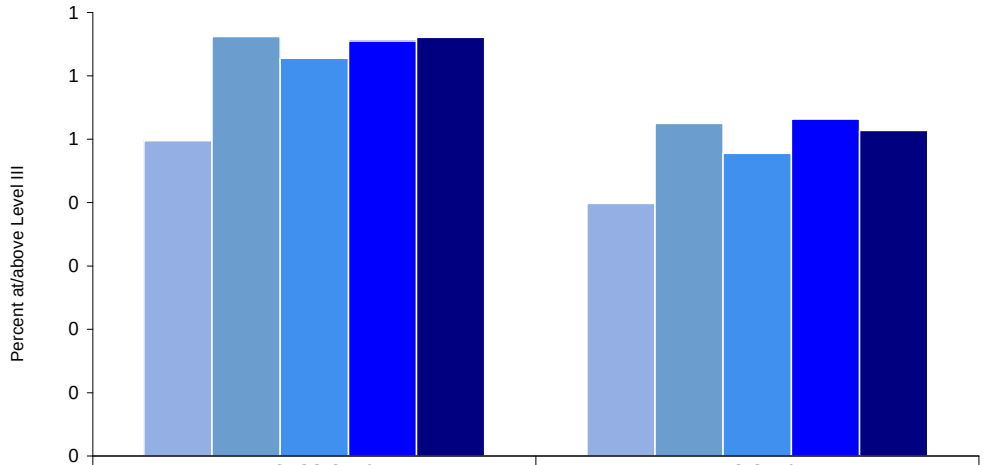
Exemptions from the writing assessment are similar to those offered for the EOG Reading test, with additional alternate assessments available. LEP students, for example, are exempt if they first entered a United States school within the past year, and they score below intermediate high

on a language proficiency test (IPT) required by the state for students whose home language is not English . These students are tested in writing with the IPT instead.

Results

Over the past five years, the percentage of WCPSS 10th graders scoring proficient on the Grade 10 Writing Test has been 10-15 percentage points higher than the statewide rate (Figure 33). Despite this, no more than two thirds of WCPSS students have scored proficient since 2003 in any one year. With respect to changes over time, both WCPSS and the state as a whole saw a significant jump in proficiency between 2002-03 and 2003-04. Since then, however, scores have remained largely unchanged for both groups.

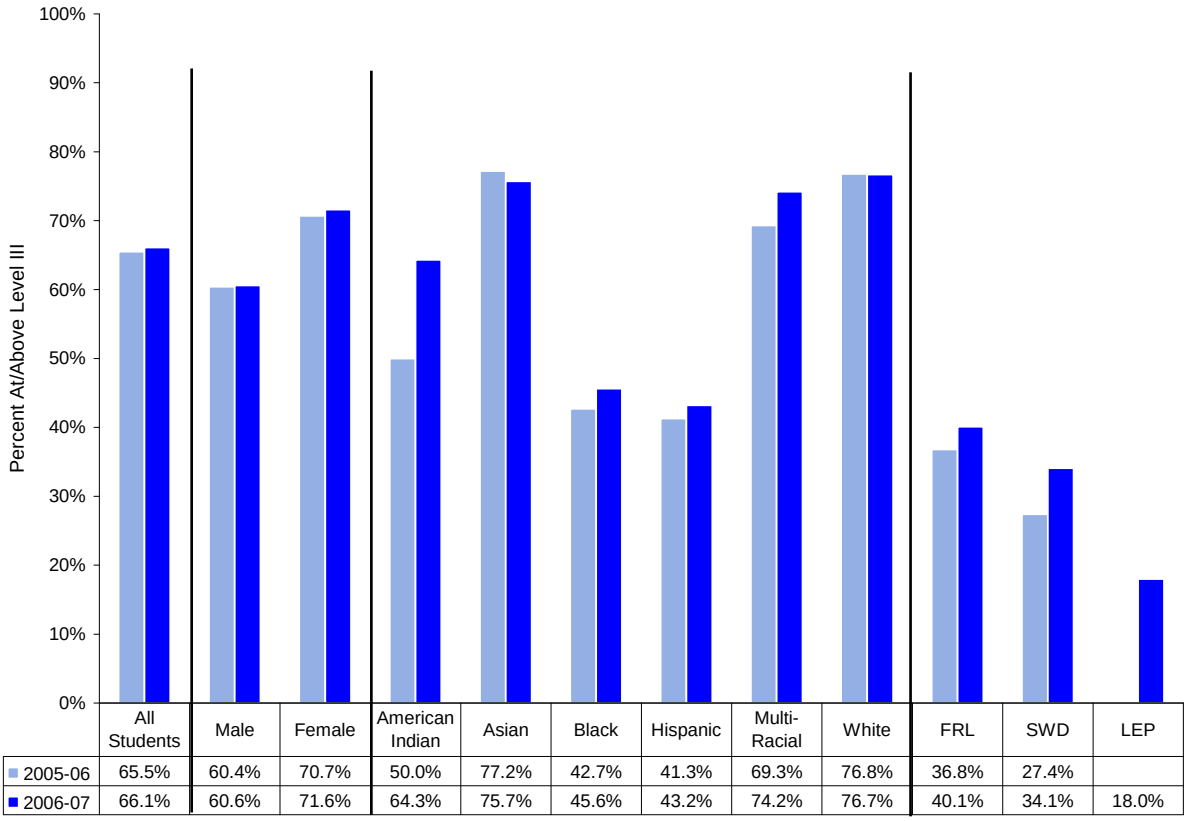
Figure 33
WCPSS Grade 10 Writing Test Proficiency Results, 2003-2007



	WCPSS Gr 10	NC Gr 10
2002-03	49.8%	39.9%
2003-04	66.2%	52.5%
2004-05	62.8%	47.8%
2005-06	65.5%	53.2%
2006-07	66.1%	51.4%

With respect to student subgroup performance in WCPSS, the same general patterns evident on EOC tests are seen on the Writing Test as well. White and Asian students were more likely to score proficient than students in other ethnic groups in 2006-07. Female students also fared better than male students, which mirrors results seen on the English I EOC. In addition, students eligible for free or reduced-price lunch (FRL) and students with disabilities (SWD) scored proficient at a much lower rate than their peers.

Figure 34
WCPSS Grade 10 Writing Assessment Proficiency Results by Subgroup, 2003-2007



	All Students	Male	Female	American Indian	Asian	Black	Hispanic	Multi-Racial	White	FRL	SWD	LEP
2005-06	65.5%	60.4%	70.7%	50.0%	77.2%	42.7%	41.3%	69.3%	76.8%	36.8%	27.4%	
2006-07	66.1%	60.6%	71.6%	64.3%	75.7%	45.6%	43.2%	74.2%	76.7%	40.1%	34.1%	18.0%

Notes: 1. As reported by NCDPI in July 2007.
2. Results for LEP students as a separate subgroup were not available in 2006.

Compared to other standardized tests administered at the high school level, although the pattern of performance across subgroups mirrors that of many EOC and other tests, the percentage of students scoring proficient on the 10th Grade Writing Test remains relatively low. However, this is in part a function of the test itself, as the statewide results are also lower than for EOC tests. The demands of the test, as well as idiosyncrasies related to the choice of prompts from year to year and the scoring methodology make interpretation of Writing Test results more difficult than for many other tests at the high school level. The Writing Assessment impacts AYP status as well as ABCs Performance Composites, but not ABC Growth status.

VoCATS

VoCATS is an instructional management system used for planning instruction, assessing and documenting student achievement, and providing accountability data for North Carolina Career and Technical Education (CTE) programs. The VoCATS system has been recognized by the U.S. Department of Education as a national instructional model and by the Rand Corporation as an exemplary statewide system to assess student learning.

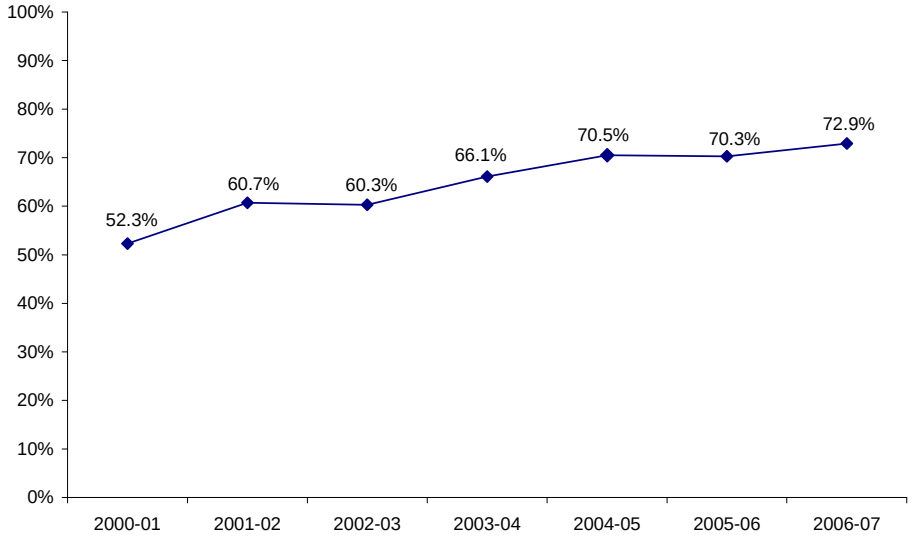
VoCATS post-assessments are end-of-course tests for CTE courses, and are provided by the North Carolina Department of Public Instruction. These tests are generated from accountability assessment item banks that have completed a strenuous validation process. VoCATS post-assessments generally consist of 100 multiple-choice items that are selected by course objective, with the number of items from each objective determined by the weight that objective is assigned on the course blueprint.

Results of VoCATS post-assessments are reported as the percentage of items answered correctly, and are categorized into four proficiency levels. These levels are: Level I = 44 percent or below, Level II = 45 – 64 percent, Level III = 65 – 81 percent and Level IV = 82 – 100 percent. Scoring Level III or higher indicates that a CTE student has met the statewide performance standard. Results are reported by class, school, and course at the local, regional, and state levels and are used to measure how well students in North Carolina Career and Technical Education courses are meeting statewide performance standards. More information on the North Carolina VoCATS program can be found at:
http://www.ncpublicschools.org/workforce_development/vocats/index.html .

In 2006-07, WCPSS administered VoCATS post-assessments for 101 CTE courses within eight program areas: agricultural education, business and information technology education, career development, family and consumer sciences education, health occupations education, marketing education, technology education, and trade and industrial education.

VoCATS scores are reported as raw scores, not normalized, and, therefore, are not comparable to core academic end-of-course and end-of-grade tests. Since 2000-01, the percentage of students scoring at or above Level III across all VoCATS tests has increased considerably, from 52.3% to 72.9% (Figure 35). Passing rates across the eight program areas range from 67.5% to 77.9% (Table 11). In each program area, 2006-07 proficiency rates for WCPSS students were higher than for the state as a whole in every area except two - agricultural and business and information technology education. Differences in passing rates across tests, however, are not indicative of more or less success, as the number, type, and difficulty of each of the VoCATS tests are not necessarily equal.

Figure 35
Overall WCPSS VoCATS Test Performance, 2001-2007



Note: 1. Inclusion rules vary slightly from those used in 2005-06 report, but are consistent on this graph.
2. Regular VoCATS post-assessments (Local and Field Test Data are not included).

Across all program areas except Agricultural Education and Business and Information Technology Education, VoCATS proficiency rates for WCPSS high school students are above the statewide rates. Analysis of 2006-07 data supports the upward trend across the past seven years.

Table 11
VoCATS Test Performance by Program Area, 2006-07

	Achievement Level					WCPSS	State
Program Area	**I**	**II**	**III**	**IV**	**Total # Tests**	**% III/IV**	**% III/IV**
Agricultural Education	57	147	333	255	793	74.1%	75.4%
Business/IT Education	259	1,145	1,943	975	4,322	67.5%	69.3%
Career Development Ed.	Field Test Year						
Family/Consumer Sciences Ed.	255	1,4511	2,768	2,671	7,145	76.1%	69.0%
Health Occupations Ed.	50	276	686	465	1,477	77.9%	75.8%
Marketing Education	86	515	977	482	2,060	70.8%	61.4%
Technology Education	126	304	553	464	1,447	70.3%	57.7%
Trade and Industrial Education	141	690	1,525	822	5,178	73.9%	62.1%
TOTAL	**974**	**17,588**	**8,785**	**6,134**	**22,422**	**72.9%**	**68.2%**

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OTHER STUDENT OUTCOMES

HIGH SCHOOL GRADUATION RATE

The vision statement for WCPSS is that all students will graduate on time prepared for the future. With graduation requirements and standards increasing, the challenge this goal presents is increasing.

The No Child Left Behind Act of 2001 requires schools that graduate 12th grade students to report a graduation rate as part of the measurement of Adequate Yearly Progress (see the AYP section of this report for more details). Until 2005-06, the available data systems across the state were not capable of producing a true "four-year" cohort graduation rate as intended by the legislation. Loosely defined, a four-year cohort graduation rate answers the question, "Of the 9th grade students who start school in a particular year, how many of them receive a high school diploma four years later?"

Although a seemingly simple question on the surface, the state's data systems were unable to produce such a rate until 2005-06 due to the many complicated details behind capturing and reporting that type of information. Prior to 2005-06, the state had relied primarily on a less desirable method referred to as an "on-time" graduation rate for calculating and reporting graduation rates for AYP purposes. This measurement answered the alternative question, "Of the students who graduated in a particular year, how many of them did so in four years or less?"

Beginning with the 2006-07 school year, the change in the new four-year cohort rate is used as the metric for AYP graduation rates for any North Carolina high school that graduates seniors. The 2005-06 four-year cohort rate – the baseline for the measurement of that change – was reported for schools, districts, and the state as a whole for the first time via the 2005-06 NC School Report Cards which are produced by NCDPI and the Governor's Office (http://www.ncreportcards.com).

Definition of the Rate

This four-year cohort graduation rate for 2006-07 is basically defined as follows: The percentage of students entering the 9th grade *for the first time* during the 2003-04 school year who earned a diploma by or prior to the Spring of 2007. There are a number of complex rules established by the state with respect to how and whether students are counted. For example:

- Students who transfer into a school *after* 9th grade are included provided that they transfer in on grade level.
- Students who transfer from one NC public school to another are taken out of the sending school's calculations, and are added to the receiving school's calculations.
- Students who receive certificates of completion rather than an actual diploma (e.g., certain students with disabilities) are not counted as graduates.

Students are excluded from school calculations under the following conditions:

- Students were repeating 9th grade in 2003-04 (i.e., were also 9th graders in 2002-03), or

- Students left the school and their whereabouts cannot be tracked (e.g., students who move to another state or another country).

Trends in Graduation Rate Results

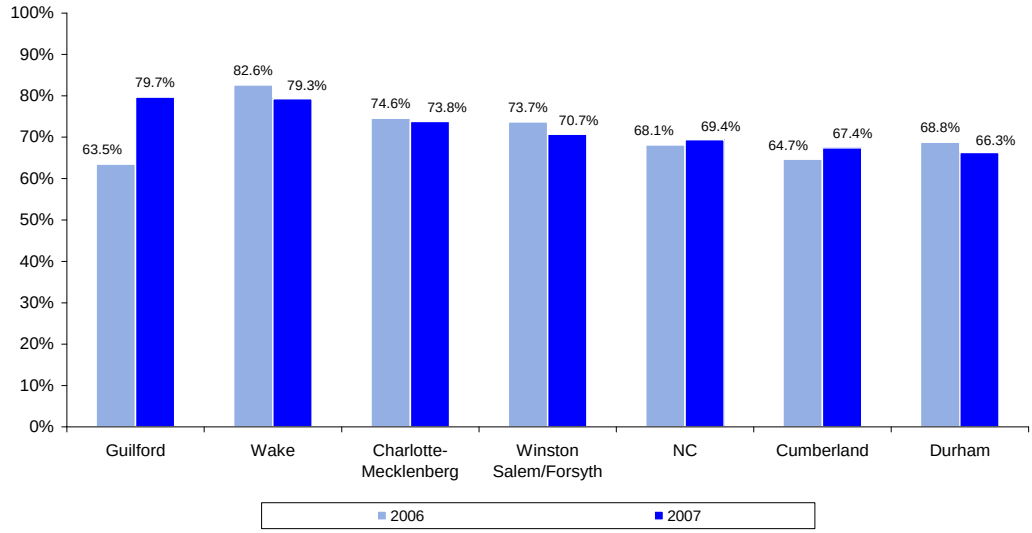
The overall graduation rate for WCPSS in 2006-07 was 79.3%, meaning that about four out of every five students who enrolled in 9th grade for the first time in the fall of 2003 had graduated four years later. This WCPSS rate was down slightly from 2005-06, when 82.6% of the cohort graduated. Comparisons reveal that WCPSS rates still compare favorably to other North Carolina districts, the state, and the nation:

- As shown in Figure 36, WCPSS rates are higher than all other large NC urban districts in 2006-07 with the exception of Guilford (which was similar).

- WCPSS graduated students at a higher rate than the state as well (79.3% compared to 69.4%). (DPI, 2007)

- Education Week, which used a different method to estimate rates, reported WCPSS to be second highest in graduation rates among the largest 50 largest districts in 2005-06 and 10th highest in 2006-07. (Ed Week, 2007)

Figure 36
Four-year Graduation Rates for NC and Selected LEAs, Spring 2006 and 2007



WCPSS trends for 2006-07 by subgroup reveal several gaps (see Figure 37):

- Female students had a higher graduation rate than male students, by close to 10 percentage points.

- The four-year graduation rate varied considerably (from 55% to 88%) among ethnic subgroups, with White and Asian students showing the highest rates and Hispanic/Latino students the lowest. All groups dropped slightly, but American Indian and Multiracial

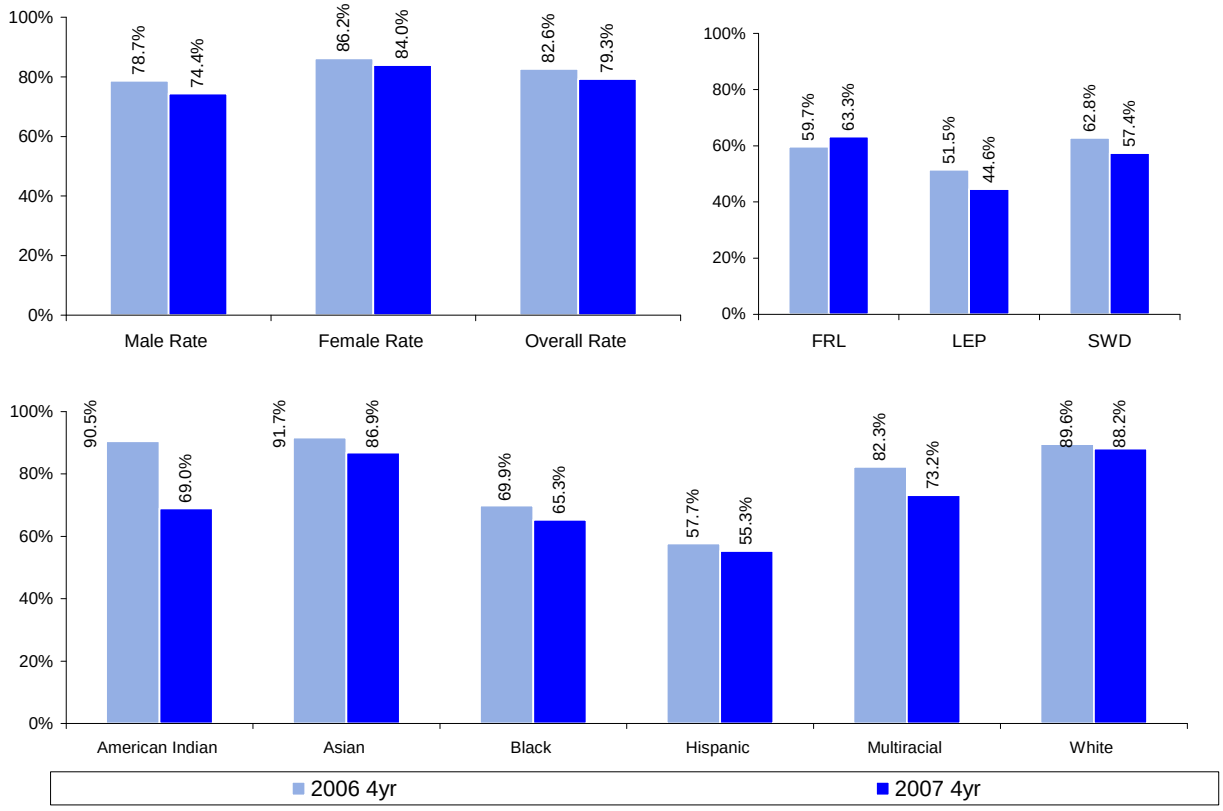
students showed the largest drops; these are also the smallest groups which are therefore more subject to fluctuation year to year.

- Students with disabilities (SWD), students eligible for free or reduced-price lunch (FRL), and students with limited English proficiency (LEP) also had graduation rates that were substantially below the systemwide average. LEP and SWD graduation rates decreased compared to 2005-06. Fewer than half of the LEP students graduated on time.

These trends were also evident in the state and national results (DPI, 2007 and Edweek, 2007).

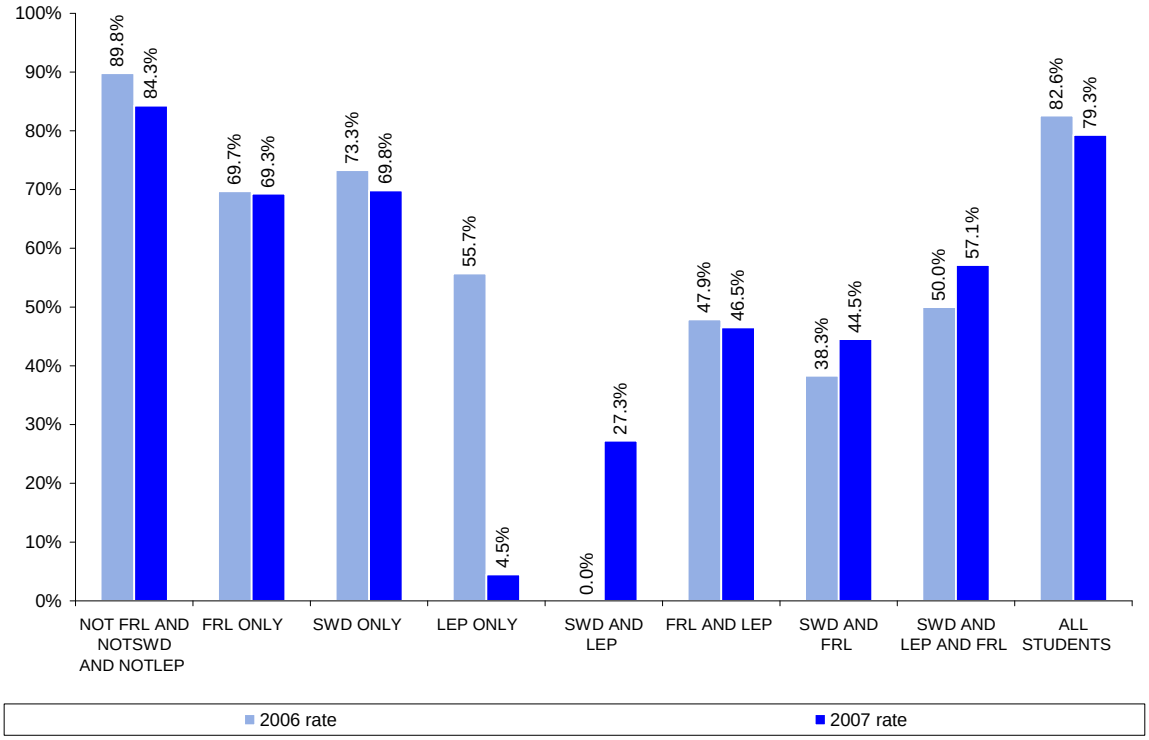
In addition, students who fell into two or more of risk categories showed even lower rates (Figure 38).

Figure 37
WCPSS Four-year Graduation Rates by Subgroups, Spring 2006 and 2007



Date Source: Official NCDPI graduation cohort files

Figure 38
WCPSS Four-year Graduation Rates by Academic Risk Group Combinations, 2006 to 2007



Data Source: Official NCDPI graduation cohort files. Note: LEP only group is very small and therefore subject to greater fluctuation.

Summary

The overall graduation rate for WCPSS in 2006-07 was high compared to the state and other similar school districts. However, it was down slightly compared to the previous cohort, and large discrepancies existed between various student subgroups. Black/African American students, Hispanic/Latino students, and students from the three academic risk groups identified (SWD, FRL, and LEP) had graduation rates that were substantially below that of other students.

The advent of new, more stringent graduation requirements for students entering high school in 2006 and beyond (see the End-of-Course Results section of this document for more information) may negatively impact graduation rates beginning with the graduating class of 2010. EOC results and 9th-grade retention rates already provide early warning signs of a negative trend in student graduation outcomes.

HIGH SCHOOL RETENTION RATE

Background

The WCPSS Board of Education's Promotion and Intervention policy, adopted in February 2000, requires students to demonstrate proficiency in grade-level competencies in English/language arts and mathematics to be promoted each year. The WCPSS policy recognizes the statutory authority of the principal to make all final promotion decisions. Additional details regarding the Promotion and Intervention policy can be found on the WCPSS Web site at: (http://www.wcpss.net/promotion-intervention) and in Board Policy 5530.

At the high school level, promotion retention decisions are based on the credits students earned through successful completion of specific required courses (for example, the appropriate English credit is required for promotion to the next grade level). EOC tests in the five required courses contribute 25% to students' final grades in the course. The state allows districts to consider a test score within one standard error of measurement as proficient for purposes of student promotion decisions, which WCPSS began to do during the 2006-07 school year. Students have the opportunity for retests and a committee review of portfolio and other evidence of mastery if students do not pass the course because of an EOC score. Additional information on the courses required for promotion can be found on the WCPSS web site (http://www.wcpss.net/curriculum-instruction/docs_downloads/planning-guides).

Overall Retention Rates

At the end of each school year, students are identified by schools as promoted, graduated, or retained, and this information is submitted to the Department of Public Instruction. Graduates are considered promoted. (Any changes in status as of fall are not reflected in these data.) Based on this definition, a very high percentage (95.4%) of WCPSS' students K-12 were promoted, in 2006-07, while 4.6% were retained. While the percentage retained is low, this percentage is up slightly from 2005-06, when 4.0% of WCPSS students were retained. Retainees also represent a large number of students who will require added instruction, up nearly 1,000 students from 4,876 students in 2005-06 to 5,856 students (see Table 12).

Grade Level

The following table also displays the promotion and retention rates of WCPSS students by grade level. While most students at all grade levels were promoted, promotion rates varied by grade, ranging from 80.5% at grade 9 to 99.5% at grade 5. There were distinct differences among grade levels and grade spans in retention rates for 2006-07.

- The high school level had the highest retention rates. By grade, 9th-grade students had the highest rate of retention (19.5%), followed by grade 10 (10.7%), and grade 11 (7.3%). All three percentages are higher than in 2005-06, but grade 9 had an alarming increase, up from 15.0 to 19.5%. This means one in five ninth grade students were not promoted to tenth grade this past spring, meaning they had to repeat one or more courses.
- The elementary level had the next highest retention rate. Kindergarten and grade 1 had the highest rate of retention (4.2% and 4.7%) within the grade span, down very slightly from 2005-06.
- Middle schools had the lowest retention rate, with about one percent of students retained at each grade.

Table 12
Promotion/Retention, 2005-06 and 2006-07, Grades K - 12

Grade	School Year	Number Retained	Percent Retained	Number Promoted	Percent Promoted	Total
KI	2005-06	513	4.8%	10,206	95.2%	10,719
	2006-07	480	4.2%	10,838	95.8%	11,318
1	2005-06	495	4.8%	9,881	95.2%	10,376
	2006-07	527	4.7%	10,662	95.3%	11,189
2	2005-06	278	2.8%	9,780	97.2%	10,058
	2006-07	278	2.6%	10,302	97.4%	10,580
3	2005-06	134	1.4%	9,636	98.6%	9,770
	2006-07	175	1.7%	10,196	98.3%	10,371
4	2005-06	80	0.9%	9,215	99.1%	9,295
	2006-07	82	0.8%	10,094	99.2%	10,176
5	2005-06	49	0.5%	9,286	99.5%	9,335
	2006-07	52	0.5%	9,656	99.5%	9,708
6	2005-06	125	1.3%	9,223	98.7%	9,348
	2006-07	84	0.9%	9,620	99.1%	9,704
7	2005-06	127	1.4%	9,303	98.7%	9,430
	2006-07	106	1.1%	9,578	98.9%	9,684
8	2005-06	135	1.5%	9,093	98.5%	9,228
	2006-07	119	1.2%	9,576	98.8%	9,695
9	2005-06	1,489	15.0%	8,473	85.1%	9,962
	2006-07	2,013	19.5%	8,324	80.5%	10,337
10	2005-06	756	8.9%	7,733	91.1%	8,489
	2006-07	968	10.7%	8,064	89.3%	9,032
11	2005-06	402	5.3%	7,240	94.7%	7,642
	2006-07	598	7.3%	7,554	92.7%	8,152
12	2005-06	293	4.1%	6,790	95.9%	7,083
	2006-07	374	4.9%	7,248	95.1%	7,622
Total	**2005-06**	**4,876**	**4.0%**	**115,859**	**96.0%**	**120,735**
Total	**2006-07**	**5,856**	**4.6%**	**121,712**	**95.4%**	**127,568**

Source: WCPSS Student Information Systems data file of K-12 students flagged as promoted, graduated, or retained as of the end of the 2005-06 and 2006-07 school years.

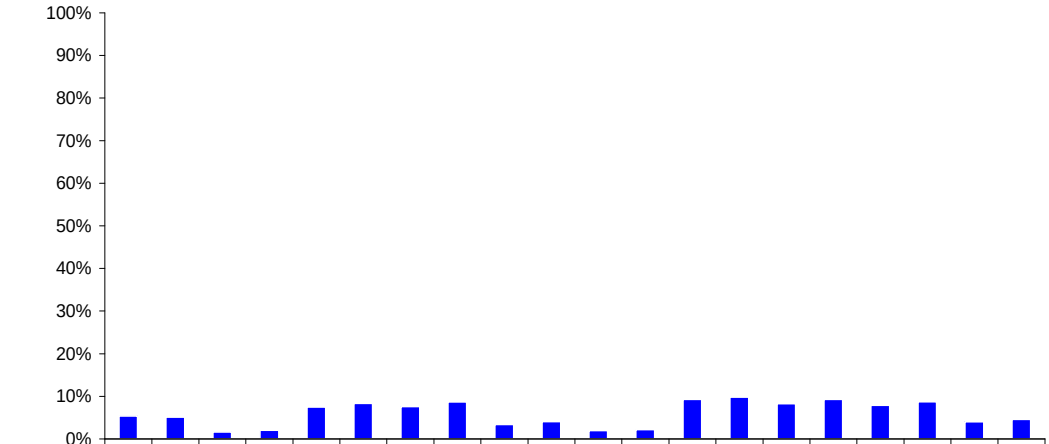
The higher rate of retention at the high school level probably reflects the different criteria used to determine promotion to the next grade. High school promotion/retention decisions are made based on successful completion of specific required courses, and students do not have to repeat the full year. Principals and school committees can make promotion recommendations for required courses where the student fails the EOC, but this is generally only done when the student has passed the course based on the other criteria. At the elementary level, higher rates of retention at kindergarten and grade 1 may reflect the belief that retention is preferable in the early grade levels to ensure that students have mastered basic skills, the belief that there is less stigma attached to retention in the early grades, maturation considerations, or local standards for grade-level status.

Ethnicity and Academic Risk Factors

More than 90% of students in all NCLB subgroups (ethnicity, FRL, LEP, SWD) in WCPSS were promoted K-12 each of the last two years. However, retention rates varied by subgroup. While the overall retention rate in WCPSS for 2006-07 was 4.6%, the percentage of students in each subgroup retained varied from 2% to over 9%. Overall trends for 2006-07 reveal that:

- LEP students had the highest rate of retention (9.8%).
- SWD and FRL students also had higher retention rates (about 9%) than other subgroups.
- Among racial groups, Black/African American and Hispanic/Latino students had the highest rates of retention (approximately 8.5%).
- All subgroups except American Indians had slightly higher retention rates in 2006-07 than in 2005-06.

Figure 39
Percentage of Students Retained for Each NCLB Group, 2005-06 and 2006-07, Grades K - 12



	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
	American Indian		Asian		Black		Hispanic/ Latino		Multiracial		White		LEP		SWD		FRL		All Students	
Retained	5.4%	5.1%	1.6%	2.1%	7.5%	8.4%	7.6%	8.7%	3.4%	4.1%	2.0%	2.2%	9.3%	9.8%	8.3%	9.3%	7.9%	8.7%	4.0%	4.6%

2006 *N* = 120,014 and 2007 N= 127,555

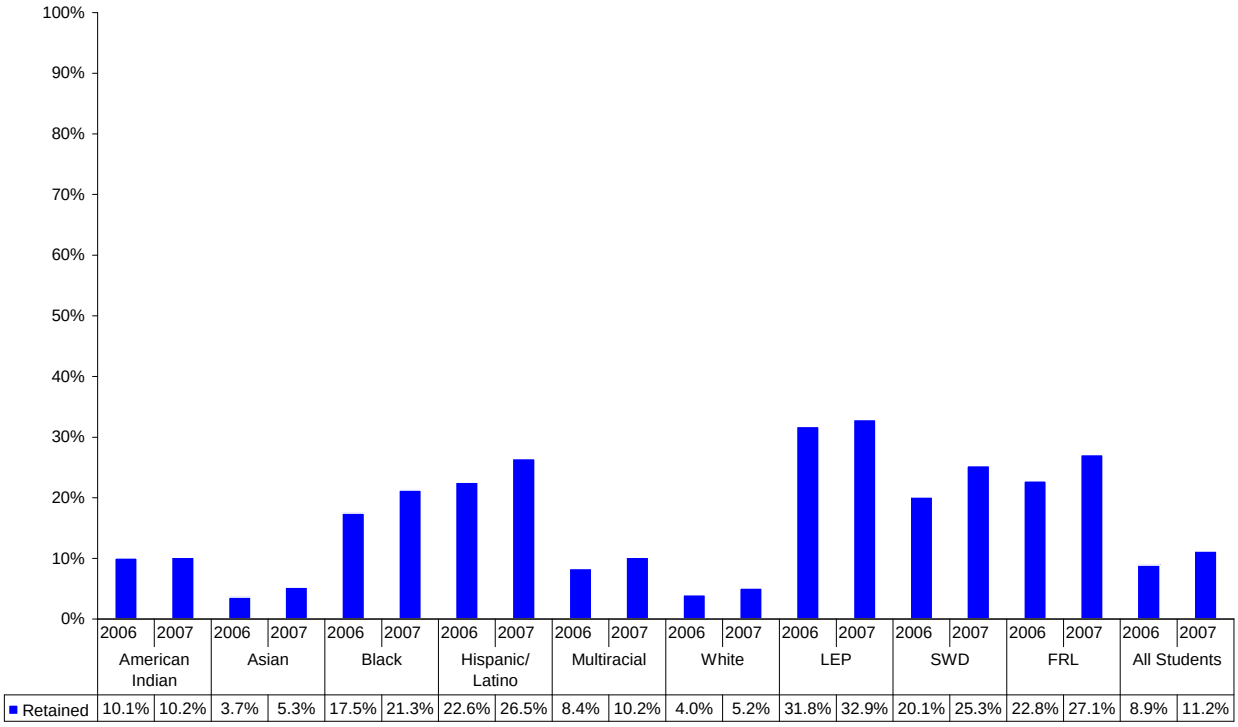
Note: 1. All ethnic groups had greater than 4,000 students except American Indian, which had 317 in 2005-06 and 332 in 2006-07
2. Ethnic counts are unduplicated, but other counts are duplicated. Thus, some students are reflected in more than one group.
3. Subgroup percentages reflect students within these groups and not the percentage of all students.

Data Source: WCPSS Student Information Systems data file of K-12 students flagged as promoted, graduated, or retained as of the end of the 2005-06 and 2006-07 school years.

Interpretation Example: The percentage of SWD students retained K-12 increased from 8.3% in 2006 to 9.3% in 2007.

While the *pattern* of students retained by subgroup at the high school level were similar to the overall (K-12) results, the percentage of students retained was considerably *higher* for each subgroup and the total, due to higher retention rates. Of particular concern were the number of students in minority and academic risk groups retained. While less than one in ten students in any subgroup were retained across K-12 in 2006-07, among high school students, one of three LEP students, one in four SWD, FRL, and Hispanic/Latino students, and one in five Black/African American students were retained in 2006-07. Increases were evident for all subgroups between 2005-06 and 2006-07, with the largest increases (of 4-5 percentage points) evident for Black/African American, Hispanic/Latino, SWD, and FRL students.

Figure 40
Percentage of Students Retained for Each NCLB Group, 2005-06 and 2006-07, Grades 9 - 12



	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
	American Indian		Asian		Black		Hispanic/ Latino		Multiracial		White		LEP		SWD		FRL		All Students	
Retained	10.1%	10.2%	3.7%	5.3%	17.5%	21.3%	22.6%	26.5%	8.4%	10.2%	4.0%	5.2%	31.8%	32.9%	20.1%	25.3%	22.8%	27.1%	8.9%	11.2%

2006 *N* = 32,698
2007 *N* = 35,142
Note: 1. Ethnic counts are unduplicated, but other counts are duplicated. All groups had over 700 students except American Indian (89 in 2005-06 and 88 in 2006-07).
2. Subgroup percentages reflect students within these groups and not the percentage of all students.
Data Source: WCPSS Student Information Systems data file of K-12 students flagged as promoted, graduated, or retained as of the end of the 2005-06 and 2006-07 school years.
Interpretation Example: The percentage of all high school students retained increased from 8.9% in Spring 2006 to 11.2% in Spring 2007.

Characteristics of Retained Students

Subgroups and Gender

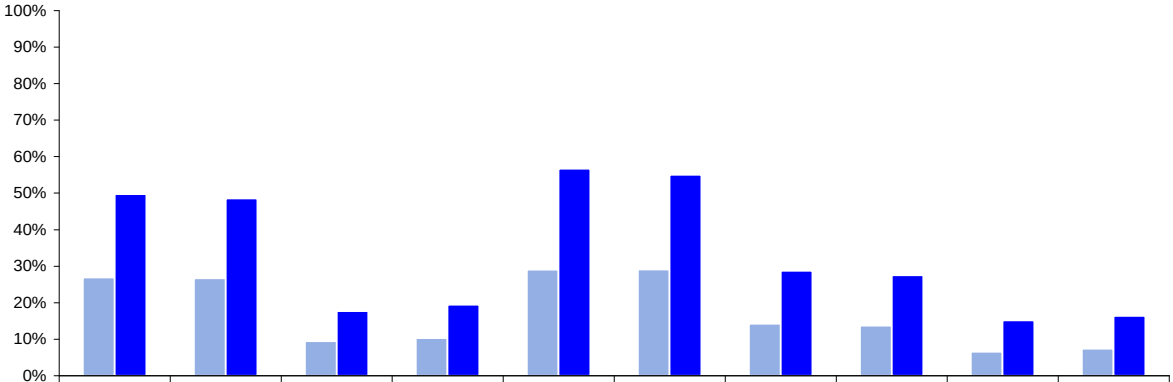
Another way to examine retention is the characteristics of those who are retained. Of the 5,856 students retained K-12 in 2006-07, the largest percentages of students were Black/African American (48.6%) followed by White (26%). More boys than girls were retained for all subgroups studied.

The proportion of students retained within each NCLB group is not equally distributed. Figure 41 displays all of the ethnic and academic risk subgroups that were over-represented among those retained at the end of 2005-06 and 2006-07, relative to the overall WCPSS population. The patterns did not change between 2005-06 and 2006-07; shifts in percentages from each group were small.

- The percentages of students retained within academic risk subgroups was approximately twice as high as their representation in the WCPSS overall.

- By ethnicity, Black/African American and Hispanic/Latino students were retained at close to twice their representation in the WCPSS population. Asian and White students were under-represented, while American Indian students were proportionally represented among retainees (not shown).

Figure 41
Student Subgroups Over-Represented among those Retained in WCPSS Relative to WCPSS Grades K-12: 2005-06 and 2006-07



	2006	2007	2006	2007	2006	2007	2006	2007	2006	2007
	Black/African Am.		Hispanic/Latino		FRL		SWD		LEP	
% of WCPSS	26.9%	26.7%	9.5%	10.3%	29.1%	29.1%	14.3%	13.7%	6.6%	7.4%
% of Retainees	49.8%	48.6%	17.7%	19.5%	56.7%	55.0%	28.8%	27.5%	15.2%	16.4%

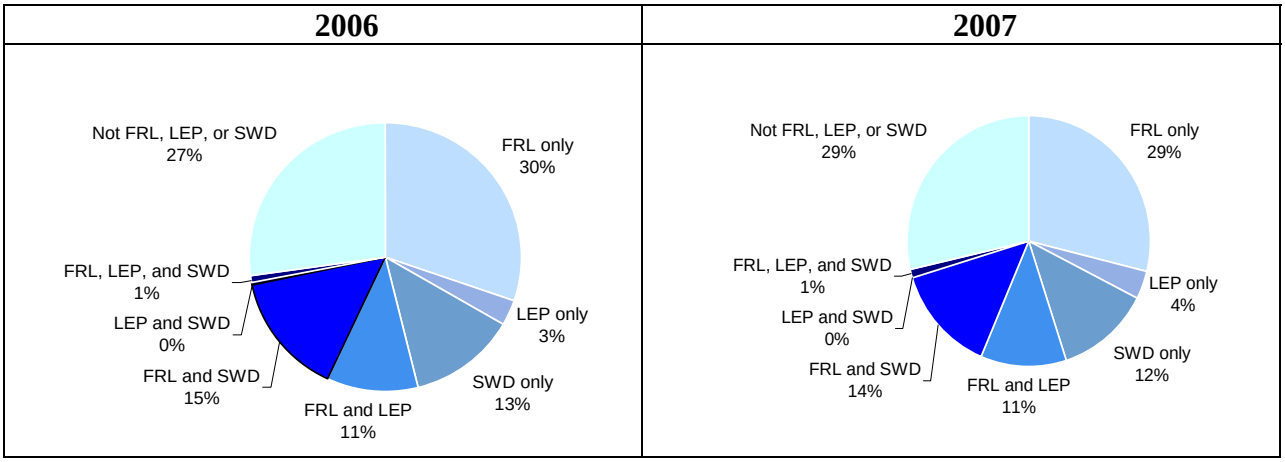
2006 N= 4,838 retained
2007 *N*= 5,856 retained
Note: Ethnic counts are unduplicated, but other counts are duplicated.
Data Source: WCPSS Student Information Systems data file of K-12 students flagged as promoted, graduated, or retained as of the end of the 2005-06 and 2006-07 school years.
Interpretation Example: The percentage of retainees who were Hispanic/Latino increased from 17.7% in 2006 to 19.5% in 2007. This is greater than their percentage in the overall WCPSS population (9.5% and 10.3% of WCPSS students in 2005-06 and 2006-07).

Academic Risk Factor Combinations

Figure 42 displays students retained at the end of 2005-06 and 2006-07 for all possible combinations of FRL, SWD, and LEP students K-12. Each student is represented in only one of the categories in Figure 42. Patterns were similar both years, with the largest shift being an increase of 2% in those retained who had no academic risk factors. Based on 2006-07:

- Overall, students with only one academic risk factor represented just less than half of the retained students (45%), while those with multiple factors represented about one fourth of retainees (26%).
- Of those retained, the largest percentages of those retained were those students who were FRL only and those who had no academic risk factors (29% each).
- Students who were both FRL and SWD represented the next highest percentage of retained students (14% of retainees), followed by those who were only SWD (12%).

Figure 42
Students Retained by Academic Risk Group Combinations, at the End of 2005-06 and 2006-07: Grades K-12



Note: LEP and SWD students are shown as 0% of retainees due to rounding. The actual percentages are less than 1%.
Data Source: WCPSS Student Information Systems data file of K-12 students flagged as promoted, graduated, or retained as of the end of the 2005-06 and 2006-07 school years.
Interpretation Example: The percentage of retained students who were FRL only decreased from 30% in 2006 to 29% in 2007.

At the high school level, FRL only students represented slightly fewer retainees, 26% versus over 33% of elementary and middle school students (not shown).

Summary

While WCPSS students were promoted at a high rate, the promotion rate varied by grade level, ethnicity, academic risk factors, and gender. The high school level had the highest rate of retention, followed by the early elementary school grades (kindergarten and grade 1). The percentages of students retained within academic risk subgroups was approximately twice as high as WCPSS overall. Students with academic risk factors as well as Black/African American and Hispanic/Latino students were similarly over-represented among retained students relative to their percentage of the population. Male students were retained at a higher rate than female students.

HIGH SCHOOL DROPOUT RATE

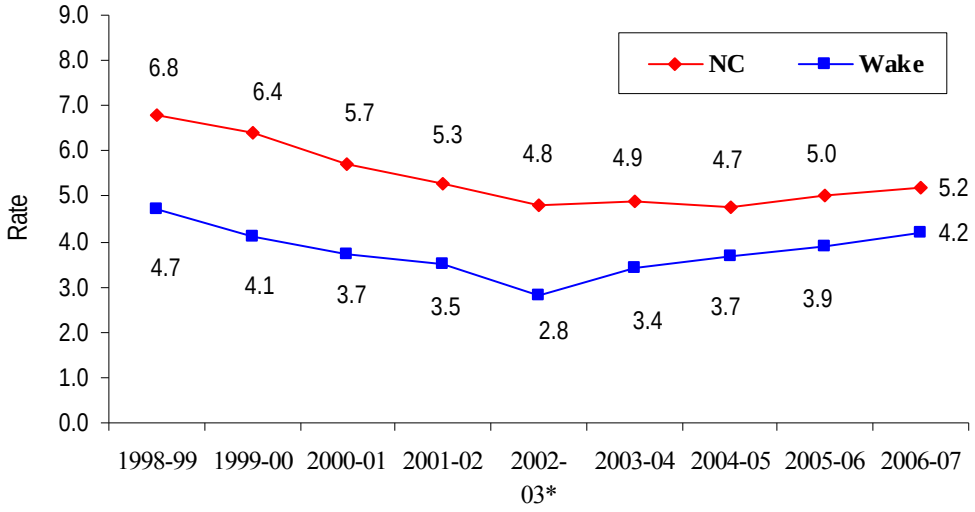
Each year WCPSS tabulates the number of dropouts from the prior school year and uses those numbers to calculate an "event dropout rate". The event dropout rate is "the number of students in a particular grade span (e.g., 9-12) dropping out in one year divided by a measure of the total students in that particular grade span" (North Carolina Department of Public Instruction (North Carolina Department of Public Instruction, 2007). These rates are considered "duplicated", as a single individual may be counted as dropping out more than once if he or she drops out of school in multiple years. However, no student who drops out is counted more than once in any give year (North Carolina Department of Public Instruction, 2007).

For the purposes of this report, dropouts are students who were enrolled at some time during the previous school year (e.g., 2006-07) but were not enrolled (and who did not meet reporting exclusions) on the 20-day of the current school year (e.g., 2007-08). Reporting exclusions include expelled students and students who transfer to a private school, home school, or a state-approved educational program. Further information on the rules and procedures for counting and reporting dropouts can be found at:
http://www.ncpublicschools.org/docs/schoolimprovement/effective/dropout/2006manual.pdf .

On February 7th, 2008 the North Carolina Department of Public Instruction released its annual dropout report for the state covering the 2006-07 school year. The figures below show 9-12th grade dropout rate for WCPSS compared to previous years' rates, compared to other large school districts in North Carolina, and compared to the state as a whole.

Between 1998-99 and 2002-03, the high school dropout rate in WCPSS dropped gradually, but the rate has been increasing slightly each year since that time (Figure 43). This pattern is similar to the state. The 2006-07 WCPSS rate was still lower than 1998-99 (4.2% compared to 4.7%). Each year since 1999, the WCPSS dropout rate has been below that of the state.

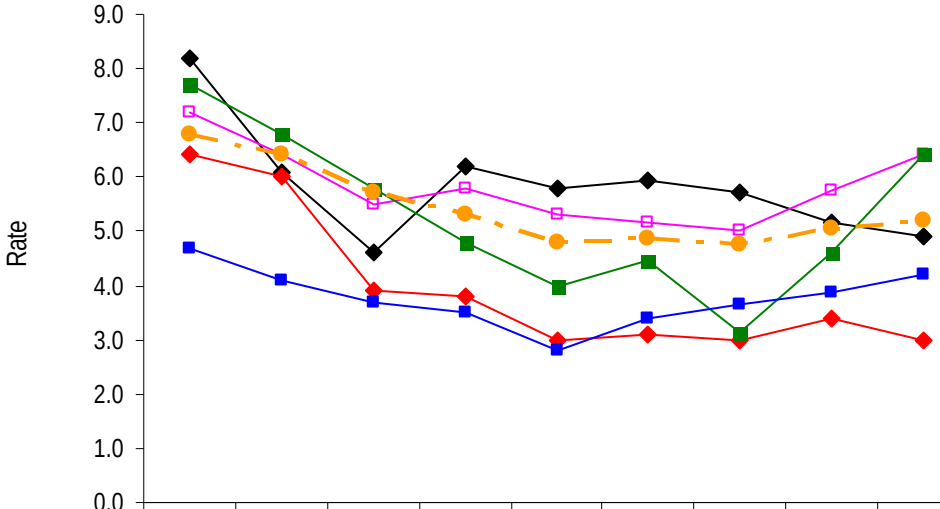
Figure 43
High School Dropout Rate, WCPSS and NC, 1999-2007



*The dropout rate for WCPSS in 2002-03 that was reported by the state was slightly higher than 2.8, as the state was missing records for a small number of dropouts that year.

Compared to other large school districts in North Carolina, Durham, Forsyth, and Mecklenburg had higher dropout rates in 2006-07 than WCPSS, while Guilford had a lower rate (Figure 44). Other districts had different patterns year to year than did WCPSS. Of those districts, only WCPSS has had a rate below 5% in each of the past nine years.

Figure 44
High School Dropout Rates in Selected NC School Districts, 1999-2007

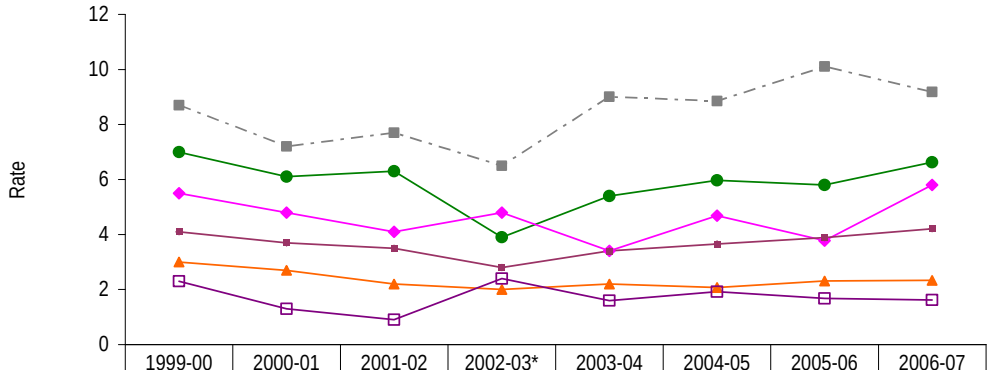


	1998-99	1999-00	2000-01	2001-02	2002-03*	2003-04	2004-05	2005-06	2006-07
Durham	8.2	6.1	4.6	6.2	5.8	5.9	5.7	5.2	4.9
Forsyth	7.2	6.4	5.5	5.8	5.3	5.2	5.0	5.7	6.4
Guilford	6.4	6.0	3.9	3.8	3.0	3.1	3.0	3.4	3.0
Mecklenburg	7.7	6.8	5.8	4.8	4.0	4.5	3.1	4.6	6.4
Wake	4.7	4.1	3.7	3.5	2.8	3.4	3.7	3.9	4.2
NC	6.8	6.4	5.7	5.3	4.8	4.9	4.7	5.0	5.2

Note: *The dropout rate for WCPSS in 2002-03 that was reported by the state was slightly higher than 2.8, as the state was missing records for a small number of dropouts that year.
Interpretation Example: The NC dropout rate in 2006-07 was 5.2%, compared to 4.2% for WCPSS, lower than rates for the other large urban districts except Guilford.

WCPSS dropout rates for Black/African American and Multiracial (N<65) students increased in 2006-07. The rate for White students stayed stable, while other groups decreased (Figure 45). The Hispanic/Latino rate has been highest over the years, and the decrease of nearly 1% between 2005-06 and 2006-07 is encouraging. No data are reported for American Indian students due to very low numbers of dropouts in that group.

Figure 45
WCPSS High School Dropout Rates by Ethnicity, 2000-2007



	1999-00	2000-01	2001-02	2002-03*	2003-04	2004-05	2005-06	2006-07
Hispanic/Latino	8.7	7.2	7.7	6.5	9.0	8.8	10.1	9.2
Black	7.0	6.1	6.3	3.9	5.4	6.0	5.8	6.6
Multiracial	5.5	4.8	4.1	4.8	3.4	4.7	3.8	5.8
White	3.0	2.7	2.2	2.0	2.2	2.1	2.3	2.3
Asian	2.3	1.3	0.9	2.4	1.6	1.9	1.7	1.6
American Indian*								
WCPSS	4.1	3.7	3.5	2.8	3.4	3.7	3.9	4.2

*Note 1. Rates for Native American students are not shown due to small group sizes.
2. The dropout rate for WCPSS in 2002-03 that was reported by the state was slightly higher than 2.8, as the state was missing records for a small number of dropouts that year.

Interpretation Example: The dropout rate for WCPSS increased to 4.2% in 2006-07 from 3.9% in 2005-06.

PERFORMANCE OF WCPSS GRADUATES IN THE UNC SYSTEM

The University of North Carolina (UNC) General Administration compiles statistics on the performance of students during their early undergraduate years at all of their campuses. These data include various indicators of success, pre-college preparation, and persistence in higher education.

By linking those measures back to the high schools from which their students graduated, school systems around the state can access information on how successful their graduates have been in the UNC system. Knowing how well WCPSS graduates perform in that system provides another indicator of how well prepared those graduates are for postsecondary education, particularly since the UNC system schools are the predominant destination for college-bound graduates from WCPSS.

As shown in Table 13 and 14, freshmen in the UNC system who graduated from a WCPSS high school had more positive experiences than UNC freshman overall as indicated by:

- a greater percentage of students with grade point averages of 3.0 or better,
- higher rates of returning for a second year to school,
- slightly less need to take remedial courses than the freshman population in general.

Table 13
Freshman GPA and Intent to Return, UNC Freshman Class of 2004-05 and 2006-07

	WCPSS Graduates	All UNC System Freshmen
GPA =>3.0 after 1 year	49.4%	40.5%
Percentage who return for a second year	87.4%	81.0%

Data Source: http://www.northcarolina.edu/content.php/assessment/reports/student_info/far.htm.

Table 14
Remediation Rates, UNC Freshman Class of 2004-05 and 2006-07

	WCPSS Graduates	All UNC System Freshmen
Taking remedial English	2.0%	2.5%
Taking remedial math	4.3%	7.4%
Taking 1 or more remedial courses total	3.3%	5.1%

Data Source: http://www.northcarolina.edu/content.php/assessment/reports/student_info/far.htm.

Additional analyses from the UNC General Administration follow students even further into their postsecondary careers. After two years in the UNC system, the positive gap between WCPSS graduates and their peers shown in Table 15 increases in size. Table 16 shows that persistence rates, grade point averages, and credit accumulation are all higher among WCPSS graduates after two years than for the UNC student population in general.

Table 15
Intent to Return, Grade Point Average, and Credit Accumulation after Two Years, UNC Freshman Class of 2003-04 and 2004-05

	WCPSS Graduates	All Freshmen
Returning for a third year	75.8%	71.4%
Returning for a third year w/ GPA =>2.0	72.3%	66.0%
Returning for a third year w/ GPA =>2.0 *and* 60 or more credits	43.2%	33.8%

Data Source: http://www.northcarolina.edu/content.php/assessment/reports/student_info/far.htm .

The UNC General Administration also follows students throughout their college careers to measure graduation and persistence rates at the five year mark. Table 16 demonstrates that WCPSS graduates were both more likely to graduate and more likely to persist after five years than their peers who entered the UNC system in 2000-01. The advantage was 7-9%.

Table 16
Five-year Graduation and Persistence Rates, UNC Freshman Class of 2000-01 and 2001-02

	WCPSS Graduates	All Freshmen
Percent graduated within 5 years	63.4%	54.9%
Percent persisting after 5 years	72.5%	65.3%

Note: "Percent persisting" includes both graduates and those students still enrolled.
Data Source: http://www.northcarolina.edu/content.php/assessment/reports/student_info/far.htm .

Taken together, the indicators reported by the UNC General Administration imply that WCPSS graduates are somewhat better prepared for academic success at the postsecondary level than are other students in general. This finding is particularly salient given the relatively large numbers of WCPSS graduates who enter that system each year.

ACCOUNTABILITY OUTCOMES

ABCs RESULTS

The ABCs of Accountability Model for elementary and middle schools was first implemented in the 1996-97 school year. The high school model was implemented in 1997-98. It includes both a performance component, which evaluates the extent to which students score proficient on various tests in each school and a growth component, which evaluates the extent to which students make progress from one year to the next.

During 2005-06, major changes in the ways the school growth is calculated were implemented. While ABCs results still represent the extent to which WCPSS schools are meeting state standards, caution must be taken when comparing recent results to those prior to 2005-06. Results for 2005-06 will therefore be emphasized as a baseline for subsequent years. More information on the details of the model can be found at http://abcs.ncpublicschools.org/abcs/.

The performance component of the model, which is measured by the Performance Composite, addresses the percentage of test scores at or above grade level (Levels III or IV), and it includes all students tested (including alternate assessments). Definitions of the levels are described in the Testing Outcomes (EOC) section of this report. Tests included in this calculation for high schools are grade 10 writing and End of Course tests.

The growth component deals with students' scores from one year to the next, and includes only students with both scores in the current year outcome as well as the previous year's predictor and who attended a school for 140 days or more. Growth calculations are based solely on EOC scores, and do not include the other tests mentioned above.

ABCs Growth Standards

The basic assumption of the ABCs growth component is that a student should be expected to do at least as well on various End-of-Course tests as she or he has done on prior tests compared to all other students who took the test in the standard-setting year. The standard-setting year is typically the first year that a test becomes operational and students receive scores for the test. Under the growth component of the model, schools can be designated as not meeting growth, meeting "Expected Growth", or meeting "High Growth". Growth results are calculated for each student in each EOC course.

For high schools, an average growth score is computed, combining the average of the academic change of the current year EOC tests for each student, the change in percent of students who met the competency requirement from 8th grade to 10th grade, the change in number of students receiving a diploma for college, technical college, or university prep and the change in number of dropouts. The average growth across all of these indicators has to be greater or equal to 0, for the high school to meet the Expected Growth Standard. In order to meet the High Growth Standard, the school must first meet Expected Growth, and then at least 60% of the students in the high school have to meet their individual growth targets on their EOC tests.

School Recognitions

In order to be designated with one of the labels the state confers upon schools, a high school must both make at least the Expected Growth Standard and have a certain percentage of their test scores fall into the Level III or Level IV range. Table 17 below provides the definitions for each of the recognition categories the state applies to schools under this accountability program.

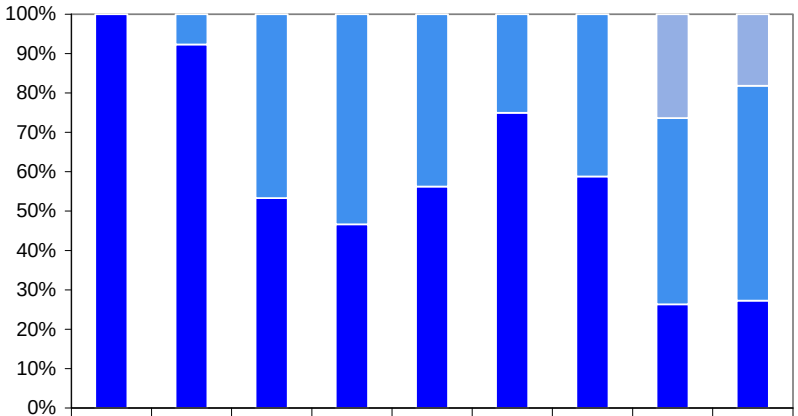
Table 17
Definition of ABCs Awards and Recognition Categories, 2006-07

Schools Making High Growth attained their high growth standard. Certified staff members each receive up to $1,500 and teacher assistants up to $500.
Schools Making Expected Growth attained their expected growth standard (but not their high growth standard). Certified staff members each receive up to $750 and teacher assistants up to $375.
Honor Schools of Excellence are schools that made at least Expected Growth, had at least 90% of their students' scores at or above Achievement Level III, and made Adequate Yearly Progress (see the AYP section of this document for further details).
Schools of Excellence are schools that made at least expected growth and had at least 90% of their students' scores at or above Achievement Level III but did not make AYP (see the AYP section of this document for further details).
Schools of Distinction are schools that made at least expected growth and had 80-89 percent of their students' scores at or above Achievement Level III.
Schools of Progress are schools that made at least expected growth and had 60-79% of their students' scores at or above Achievement Level III.
Schools Receiving No Recognition did not make their expected growth standards but have at least 60% of their students' scores at or above Achievement Level III.
Priority Schools are schools that have less than 60% of their students' scores at or above Achievement Level III, irrespective of making their expected growth standards, and are not Low-Performing Schools.
Low-Performing Schools are those that failed to meet their expected growth standards and have less than 50% of their students' scores at or above Achievement Level III.

Note: Adapted from http://www.ncpublicschools.org/docs/accountability/reporting/abc/2006-07/execsumm.html.

Of the 22 high schools in WCPSS in 2006-07, 12 met their Expected Growth Standard (54.5%) and 6 their High Growth Standard, (27.3%) for a total of 81.8% (Figure 46). That is an improvement of 8 percentage points from 73.7% in 2005-06, the first year of the new ABC model. The percentage of schools not meeting the expected growth standard showed a corresponding decrease. Figure 46 shows the percentage of WCPSS high schools meeting the state's growth standards since 1998-99, which illustrates that the ABC model in place the last two years has been more difficult for schools to meet.

Figure 46
WCPSS High School Performance under the ABCs Growth Model, 1999-2007



	1999 n=13	2000 n=13	2001 n=15	2002 n=15	2003 n=16	2004 n=16	2005 n=17	2006 n=19	2007 n=22
Schools Not Meeting Expected Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	26.3%	18.2%
Schools Achieving Expected Growth	0.0%	7.7%	46.7%	53.3%	43.8%	25.0%	41.2%	47.4%	54.5%
Schools Achieving High Growth	100.0%	92.3%	53.3%	46.7%	56.3%	75.0%	58.8%	26.3%	27.3%

Interpretation Example: 54.5% of high schools achieved expected growth and 27.3% achieved high growth in 2006-07 in WCPSS.

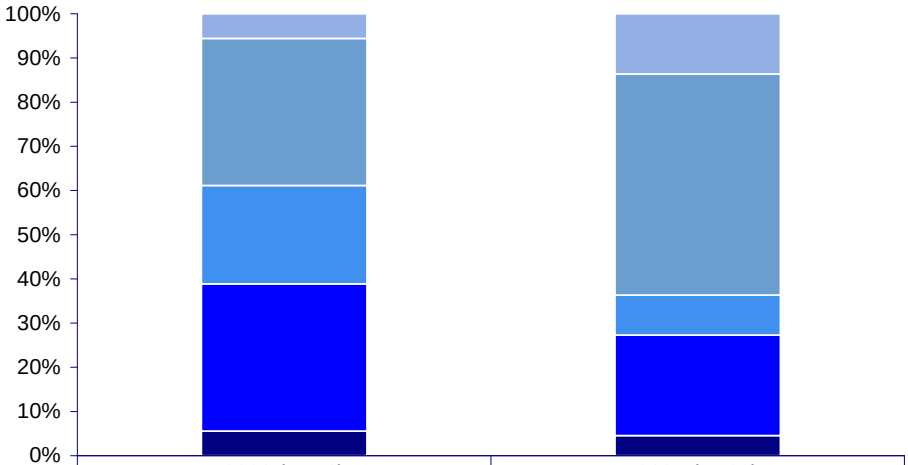
As shown in Figure 47, 27.2% of WCPSS high schools earned the high recognitions of Honor School of Excellence (1 school) or School of Distinction (5 schools) in 2006-07. Green Hope High School met the state's highest honor category (Honor School of Excellence) for the second year in a row. Nearly half of WCPSS high schools fit in the category of School of Progress, meaning the schools met the Expected or High Growth standard and had 60-79% of students score at or above Level III. WCPSS also had 23% of high schools fit in the two lowest categories of Priority School (n=3) and No Recognition (n=2).

Compared to the state of North Carolina, WCPSS 2006-07 results were more positive. WCPSS has more high schools earning the School of Distinction recognition (23% compared to 7% statewide) and fewer in the Priority (14% compared to 30%) and Low Performing (0% compared to 5%) categories.

Even though more WCPSS schools were able to meet ABC growth standards in 2006-07 compared to 2005-06, the pattern of WCPSS schools earning state recognitions was not as positive in 2006-07 as in 2005-06. The percentage of schools earning the School of Distinction criteria was down 10.6 percentage points, and the percentage of schools considered a Priority

School was up (by 8 percentage points). On a positive note, more schools earned the School of Progress recognition, while fewer were in the No Recognition category.

Figure 47
Distribution of WCPSS High Schools by ABCs Award and Recognition Categories, 2006-07



	2006 (N=18)	2007 (N=22)
Priority School	5.6%	13.6%
School of Progress	33.3%	50.0%
No Recognition	22.2%	9.1%
School of Distinction	33.3%	22.7%
Honor School of Excellence	5.6%	4.5%

Interpretation Example: 5 high schools in WCPSS (22.7%) obtained the recognition category of School of Distinction in 2006-07.

ABCs Results by EOC Test

The calculations underlying the growth component of the ABCs Accountability model also permit the analysis of growth by EOC test. Figure 48 shows trends across years (for those tests given two years in a row), and by school year. Patterns are not the same across years. In 2006-07:

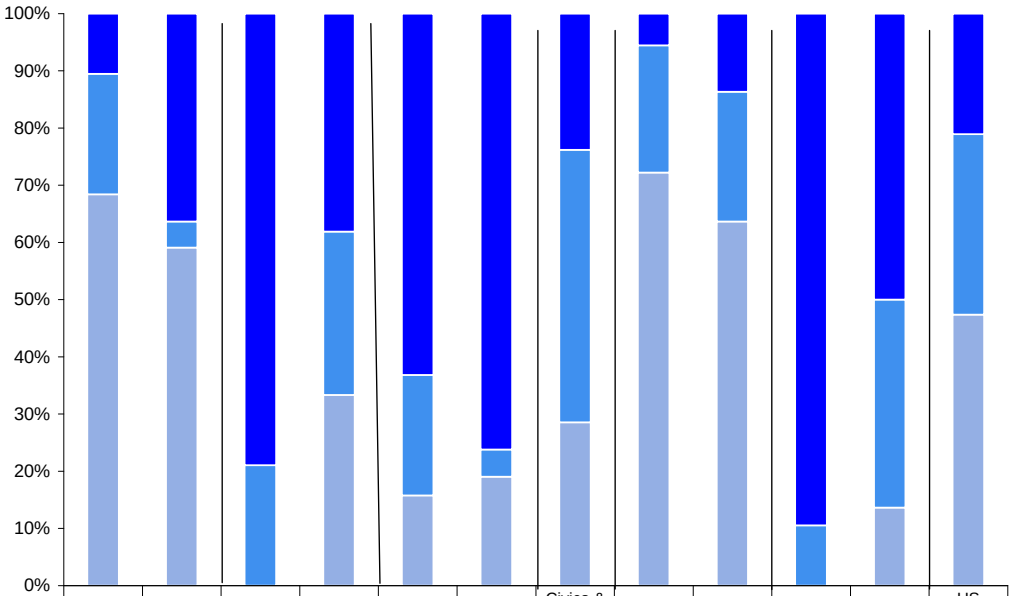
- The most positive pattern for meeting ABC expectations was found for English I, with 87% of WCPSS high schools achieving expected (23%) or high (64%) growth.
- Biology had the least positive pattern, with only 24% of WCPSS high schools achieving either expected (5%) or high (19%) growth.
- Just over one third of the schools failed to achieve expected growth in Algebra I and Algebra II, and one fourth of the schools failed to reach expected growth in Civics and Economics.

For tests given in both 2005-06 and 2006-07, some patterns improved while others did not.

- The percentage of schools achieving expected or high growth increased in Algebra II and Geometry, but decreased in Algebra I and Biology and English I.

- The percentage of schools achieving high growth improved in Algebra II and Geometry, showing overall improvement in results. In addition, the percentage of schools achieving high growth in Biology also increased, showing most schools either did quite well compared to ABC standards or not very well.

Figure 48
WCPSS High Schools ABCs Growth Results by Subject
2005-06 and 2006-07



	Algebra 1 2005-06	Algebra 1 2006-07	Algebra 2 2005-06	Algebra 2 2006-07	Biology 2005-06	Biology 2006-07	Civics & Econ. 2006-07	English 1 2005-06	English 1 2006-07	Geometry 2005-06	Geometry 2006-07	US History 2006-07
Did Not Meet Expected Growth	10.5%	36.4%	78.9%	38.1%	63.2%	76.2%	23.8%	5.6%	13.6%	89.5%	50.0%	21.1%
Achieved Expected Growth	21.1%	4.5%	21.1%	28.6%	21.1%	4.8%	47.6%	22.2%	22.7%	10.5%	36.4%	31.6%
Achieved High Growth	68.4%	59.1%	0.0%	33.3%	15.8%	19.0%	28.6%	72.2%	63.6%	0.0%	13.6%	47.4%

Interpretation Example: The percentage of WCPSS high schools attaining high growth for geometry increased from 0 in 2005-06 to 13.6% in 2006-07 and the percentage of high schools attaining expected growth increased by more than 25%, showing better results for geometry in 2006-07 than in 2005-06.

ABCs Results for Subgroups within Courses

In addition to allowing for the calculation of growth by EOC test, the state's new growth model also allows for the calculation of growth for each individual student. For the courses commonly taken by WCPSS students which have used the same test for two years, the percentages of students meeting growth targets was similar in Algebra I and English I, but lower in Biology (Figures 49 through 51).

In Algebra I and English I, more than 60 percent of students overall met their individual growth targets. This 60% threshold corresponds to the state's definition of "High Growth" for a school.

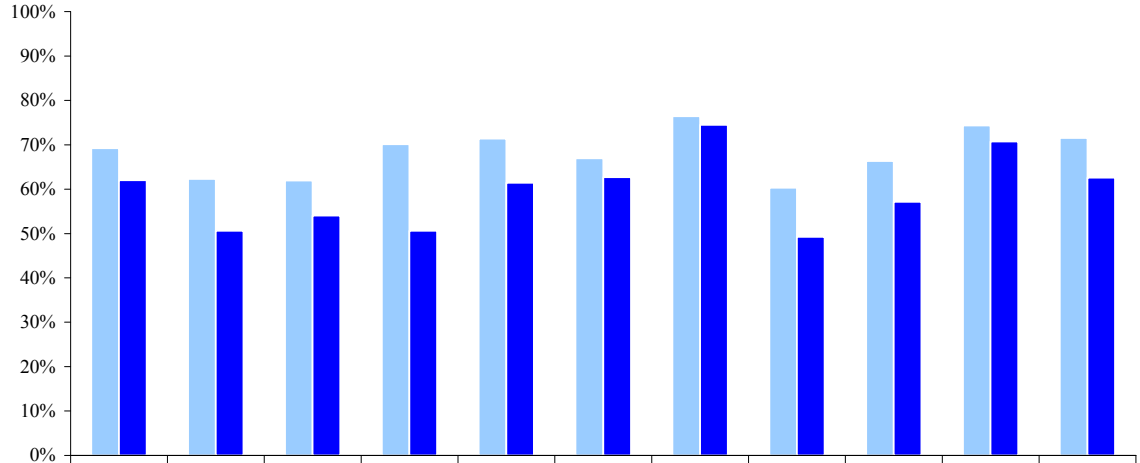
- In Algebra I, over 60% of students met their growth targets for Asian students, White students, Multiracial students, female students, and male students (Figure 49). However, fewer than 60% of Hispanic/Latino students, Black/African American students, and those with academic risk factors met their growth targets.

- In English I, the subgroup results were the same as Algebra I except that just less than 60% of Multiracial and male students met their achievement targets.

Results in Biology were lower, with 48% of WCPSS students overall meeting their growth targets. Variation among subgroups was also wider than in either Algebra I or English I. Asian students were the only subgroup with over 60% meeting their growth targets. White, LEP, and male students had between 53% and 58% of students meeting growth targets, with FRL, SWD, female, Black/African American and Hispanic/Latino, and Multiracial students below 50%. Only 36% of FRL students met their growth targets in Biology.

Asian students were most successful in meeting growth targets across the three tests. The least successful group varied by test (Black/African American students for Algebra I, SWD students for English I, and Black/African American students for Biology). Interestingly, male students outperformed female students in meeting growth targets in Biology, while the opposite was true in English I. Males and females showed similar success in meeting growth targets in Algebra I.

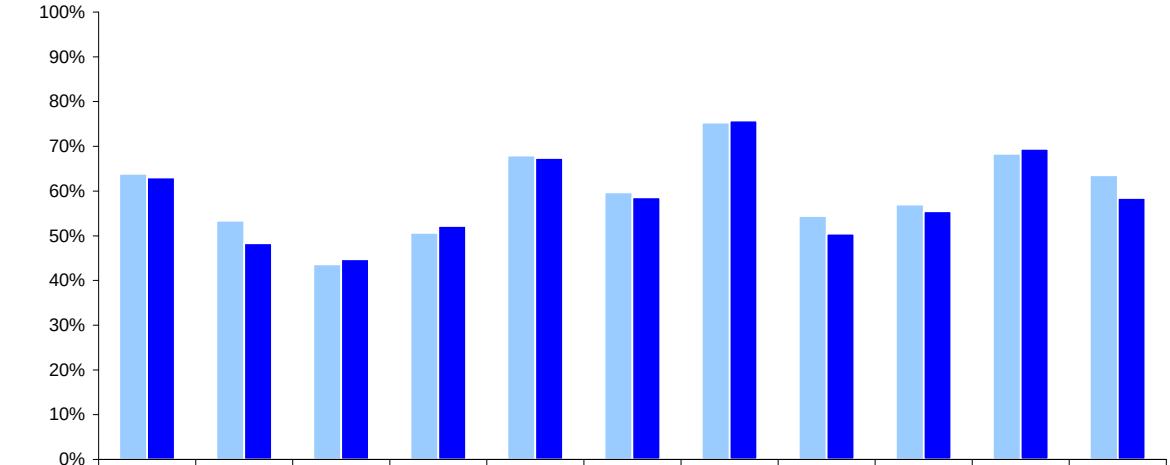
Figure 49
Percent of Students Achieving their ABCs Growth Targets, Algebra I, 2006-07



	All Students	FRL	SWD	LEP	Female	Male	Asian	Black	Hispanic Latino	White	Multiracial
2005-06	69.2%	62.3%	61.9%	70.1%	71.4%	66.9%	76.4%	60.3%	66.3%	74.3%	71.5%
2006-07	62.0%	50.6%	54.1%	50.6%	61.4%	62.7%	74.5%	49.3%	57.1%	70.7%	62.6%

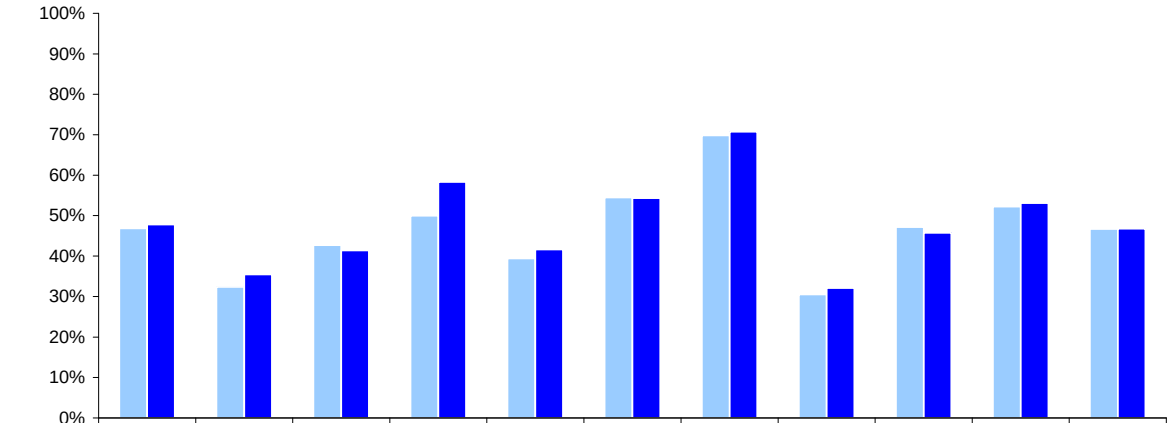
Interpretation Example: 74.5% of WCPSS Asian high school students met their growth expectation for Algebra 1 in 2006-07.

Figure 50
Percent of Students Achieving their ABCs Growth Targets, English I, 2006-07



	All Students	FRL	SWD	LEP	Female	Male	Asian	Black	Hispanic Latino	White	Multiracial
2005-06	63.8%	53.4%	43.6%	50.7%	67.9%	59.7%	75.3%	54.4%	57.0%	68.3%	63.6%
2006-07	63.0%	48.3%	44.7%	52.2%	67.4%	58.6%	75.7%	50.5%	55.5%	69.4%	58.5%

Figure 51
Percent of Students Achieving their ABCs Growth Targets, Biology, 2006-07



	All Students	FRL	SWD	LEP	Female	Male	Asian	Black	Hispanic/ Latino	White	Multiracial
2005-06	46.9%	32.4%	42.7%	50.0%	39.4%	54.5%	69.8%	30.6%	47.1%	52.2%	46.7%
2006-07	47.8%	35.5%	41.4%	58.3%	41.6%	54.3%	70.7%	32.1%	45.7%	53.1%	46.8%

Summary

Compared to 2005-06, when the new ABCs model was first put in place, WCPSS schools fared better on the ABCs. For the EOCs required for graduation for most students, students were more successful in meeting growth targets in English I, U.S. History, and C&E than in Biology.

Gaps in success based on ABCs targets by subgroup are similar to EOC proficiency results, with White and Asian students more likely to show performance at targeted levels than other ethnic subgroups, and students with academic risk factors also lagging behind. However, at least 25% of each ethnic group did not meet growth targets, which represents high numbers of students overall. In other words, many of the student subgroups which are least likely to score proficient on End-of-Course tests are also less likely to meet their individual growth expectations on those tests when taking into consideration their past performance on other tests.

AYP RESULTS

Adequate Yearly Progress (AYP) is a series of targets that schools, school districts, and states must meet each year to fulfill the requirements of the federal Elementary and Secondary Education Act (also referred to as the No Child Left Behind Act of 2001). The ultimate goal is for 100% of students to score proficient in reading and mathematics by 2013-14.

In North Carolina, the primary measures used are End-of-Grade (EOG) tests for grades 3-8 and selected End-of-Course (EOC) tests for high schools. High school measurements are based on Algebra I (for mathematics) and a combination of English I EOC tests and the 10th-grade Writing Test (for reading). The 10th-grade High School Comprehensive Test is also used for a small number of students who had not taken an Algebra I and/or English I course.

Each school may have up to ten student subgroups that must meet the prescribed targets in both reading and mathematics; these include all students plus students who are American Indian, Asian, Black/African American, Hispanic/Latino, Multiracial, White, economically disadvantaged (defined as FRL), students with limited English proficiency (LEP), and students with disabilities (SWD).

The achievement of these targets is measured by the percentage of students who take certain tests, as well as the percentage of students who pass those tests. Proficiency targets are set to increase incrementally every three years until they all become 100% in 2013-14. In order for a school to be designated as achieving AYP, all subgroups of students must have met the following targets:

- 95% participation rate in the school's appropriate reading assessment
- 95% participation rate in the school's appropriate mathematics assessment
- proficiency target in reading (76.7% in grades 3-8; 35.4% in grade 10)
- proficiency target in mathematics (65.8% in grades 3-8; 70.8% in grade 10 based on Algebra I)

In addition to the four participation and performance targets for each subgroup, the school as a whole must also show progress on another "academic indicator." Schools that have 12th graders use the graduation rate, while all other schools use attendance rate.

Thus, a school could potentially have as many as 41 targets, including participation targets, proficiency targets, and the school-wide academic indicator. All targets must be met for a school to meet AYP. If a school misses even one of those targets, the school fails to make AYP. Whether a school makes AYP each year influences the performance categories into which the state classifies schools each year (see the ABCs section of this report for further details). Also, for schools that receive certain federal funding under Title I of the Elementary and Secondary Education Act, failing to make AYP for multiple consecutive years can result in mandatory interventions such as supplementary tutoring, offering students the option to transfer to other schools, or even reconstituting the school with a new staff in more extreme cases. In WCPSS only elementary schools receive Title I funds at this time. (See DPIs Web site for more

information on NCLB and AYP in North Carolina Public schools at http://www.ncpublicschools.org/nclb/ .)

For AYP proficiency rates at the school level, schools are responsible for the performance of any subgroup for which there are at least 40 students in grades 3-8 or grade 10 who have been in membership for a full academic year. (A full academic year is defined by the state as 140 of the 180 possible days in membership during the school year.) AYP subgroups with a minimum of 40 students enrolled on the first day of testing (regardless of how many of those students meet the membership requirement) must also meet the "95% tested" requirement for both reading and mathematics assessments.

If a particular subgroup meets the 95% participation rate but does not meet the target proficiency for a subject area, the subgroup can still meet AYP through what is referred to in the law as the "Safe Harbor" provision. The Safe Harbor provision is invoked if the subgroup has reduced the percentage of students *not* proficient by 10% from the previous year for that subject area *and* if the subgroup shows progress on the other academic indicator (attendance or graduation rate). However, Safe Harbor is not available if the subgroup did not have 40 students in both the current and the previous year.

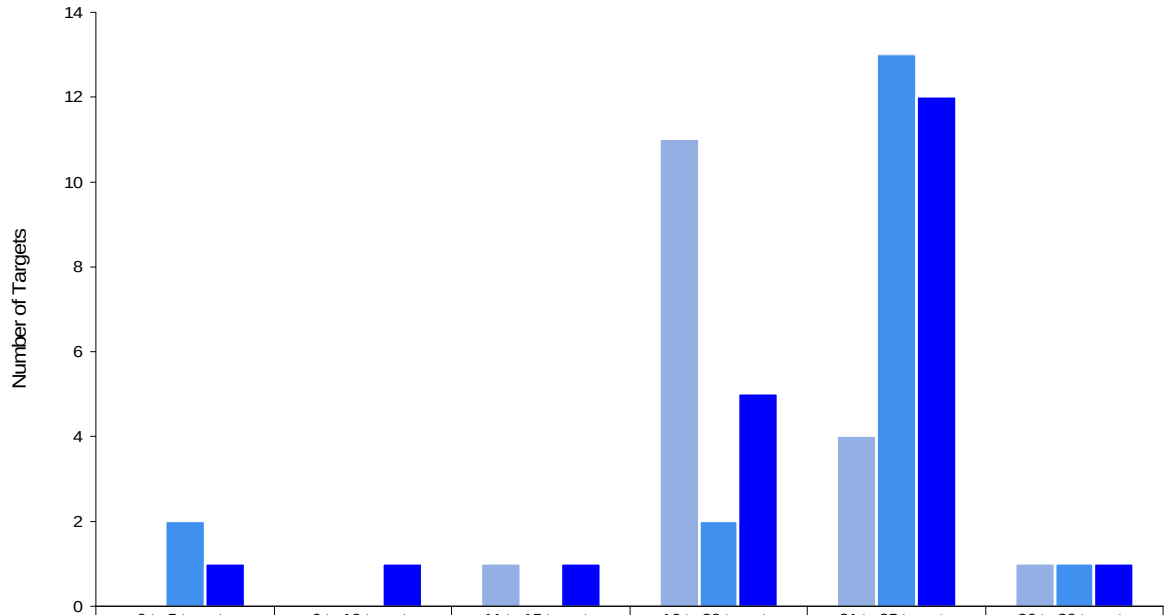
The aforementioned changes in mathematics standards made AYP more difficult to reach starting in 2005-06. Adjustments to targets by DPI did not fully compensate for the change in standards. WCPSS' mathematics 3-8 EOG proficiency went from 92% in 2004-05 to 75% in 2005-06, a drop of 17 percentage points. In that same year, the statewide mathematics AYP target was dropped 15 percentage points. AYP will also be more difficult to reach in future years, since the overall goal of 100% of students meeting targets in 2013-14 has not changed, thereby requiring more rapid improvement in the coming years to reach that goal.

In order to meet the high school reading target, each 10^{th} grader must score proficient on both the English I EOC *and* the 10^{th} grade writing test. The high school level is the only one which incorporates the writing test into AYP status. The 10th-grade High School Comprehensive Test was also used for a small number of students who had not taken an Algebra I course.

AYP High School Results

In 2006-07, most regular high schools had 16 to 25 targets (see Figure 52). In 2006-07, the range of targets among regular high schools was 4 to 29, with 13 schools having 21 or more. Schools had an average of 20 targets each of the last two years.

Figure 52
Number of Regular High Schools with Various Numbers of AYP Targets, 2004 to 2007

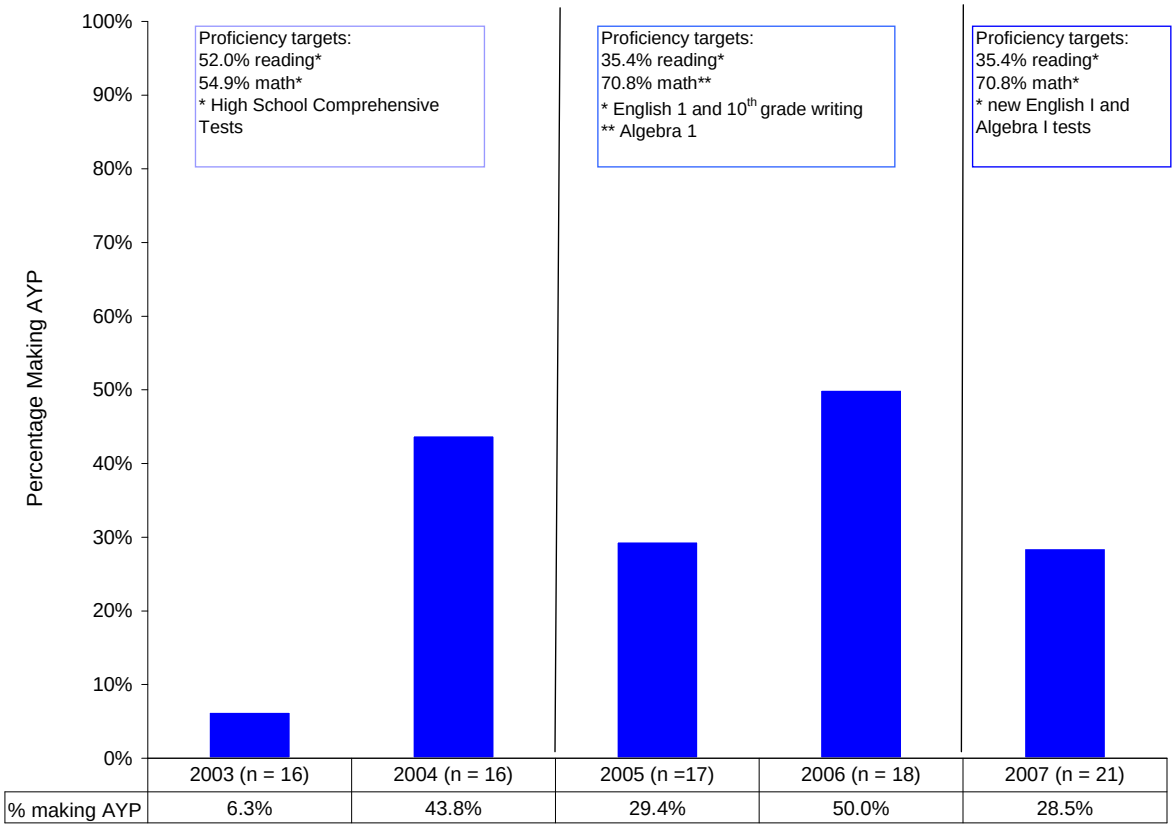


	0 to 5 targets	6 to 10 targets	11 to 15 targets	16 to 20 targets	21 to 25 targets	26 to 30 targets
2004-05	0	0	1	11	4	1
2005-06	2	0	0	2	13	1
2006-07	1	1	1	5	12	1

Note: Phillips High School (an alternative school) is not included above; the school had 2 targets.
Interpretation Example: In 2006-07 there were 12 regular high schools that had between 21 and 25 AYP targets to be met, as compared to 13 schools in 2005-06 and 4 schools in 2004-05.

In 2006-07, 6 of 21 regular WCPSS high schools (28.5%) made AYP (Figure 53), lower than the 50% success rate in 2005-06. It is difficult to compare results fairly across years because the measures and standards keep changing, but the federal schedule for 100% proficiency does not change. In addition, North Carolina has put more rigorous standards in place. For example, new Algebra I and English I EOC tests were put in place in 2006-07, which had more rigorous standards. Participation rates were also an issue in more schools than in past years.

Figure 53
WCPSS High Schools Making Adequate Yearly Progress, 2003-2007

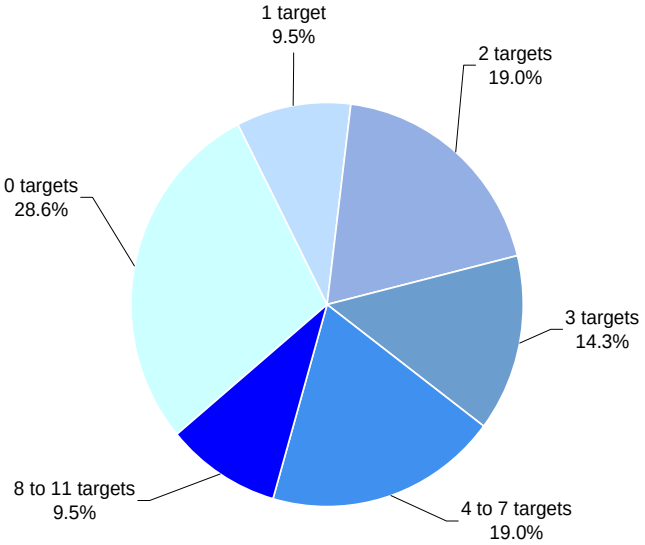


	2003 (n = 16)	2004 (n = 16)	2005 (n =17)	2006 (n = 18)	2007 (n = 21)
% making AYP	6.3%	43.8%	29.4%	50.0%	28.5%

Note: Phillips High School (an alternative school) is excluded from these figures. In 2006-07, Phillips had two targets and missed one.

Of the 21 high schools in WCPSS, six made AYP (28.6%) and another six missed only one or two targets (28.6%), representing over half of the schools (see Figure 54). On the high end, two high schools missed 8-11 targets.

Figure 54
Percent of High Schools and Number of Targets Missed, 2006-07



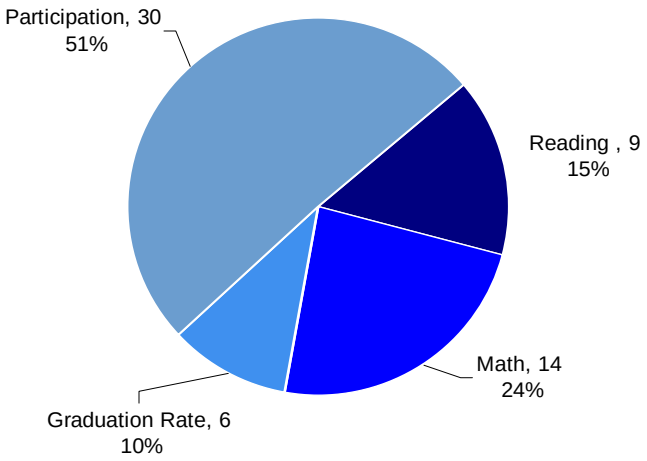
N = 21
Interpretation: 28.6% of the 21 high schools missed 0 AYP targets and therefore met AYP.

In 2006-07, WCPSS high schools met 356 of 415 (86%) of their targets. This was lower than in 2005-06, when WCPSS high schools made 343 (92%) of the 373 targets.

As shown in Figure 55, 59 targets were missed overall (up from 31 in 2005-06). Just over half (30 targets) were for participation—schools tested less than 95% of students in a particular subgroup. This was an issue last year as well, when 15 of 31 targets missed were for test participation. Participation targets are more difficult for high schools to achieve (compared to elementary or middle schools). High schools sometimes have a difficult time identifying students who need to take the high school comprehensive or an alternative assessment. Missing a few students in some of the small subgroups can lead to participation rates of less than 95%. In addition, more limited days are allowed for make-ups on the Writing Test, which is only part of the AYP calculations at the high school level. Tenth-grade students who were absent for regular and make-up testing days for any reason (excused or unexcused) cannot not be tested, according to state guidelines.

Test performance targets accounted for 23 additional targets missed (39%). Mathematics targets were missed more often than reading (which is English and writing at the high school level). Finally, six targets missed related to the other academic indicator of graduation rate.

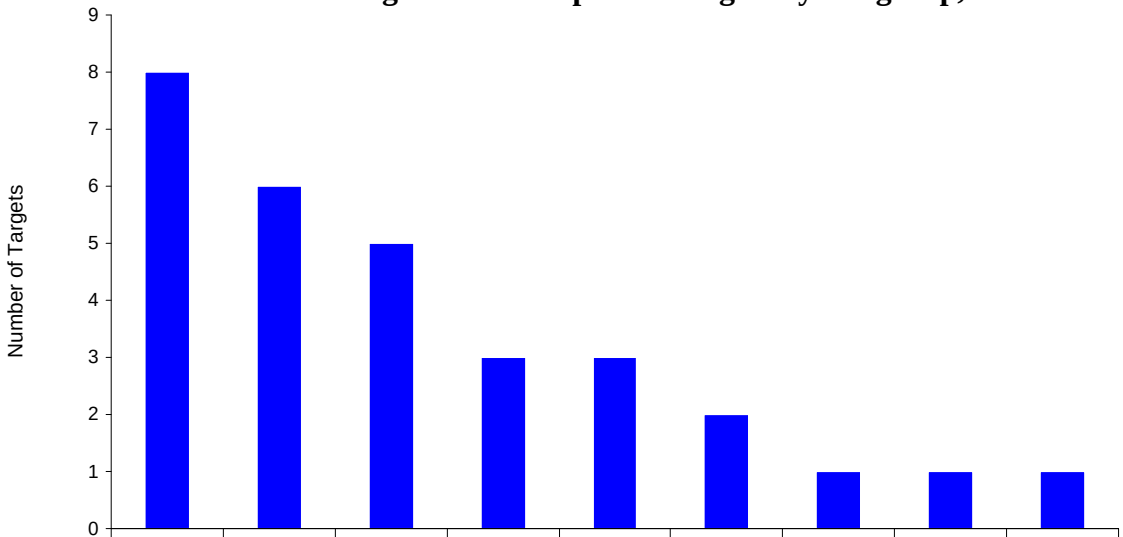
Figure 55
AYP Targets Missed by Type, 2006-07



Note: Total targets missed were 59. Type of target, number of targets, % of targets (e.g., Participation, 30, 51%)
Interpretation Example: 30 targets that were missed were for test participation, 51% of the total targets missed.

As Figure 55 illustrates, of the 30 AYP participation targets that were missed, 13 (43%) were targets for the students with disabilities subgroup, and nine (30%) were targets for economically disadvantaged students (commonly referred to as FRL in WCPSS).

Figure 56
Number of Schools Missing AYP Participation Targets by Subgroup, 2006-07

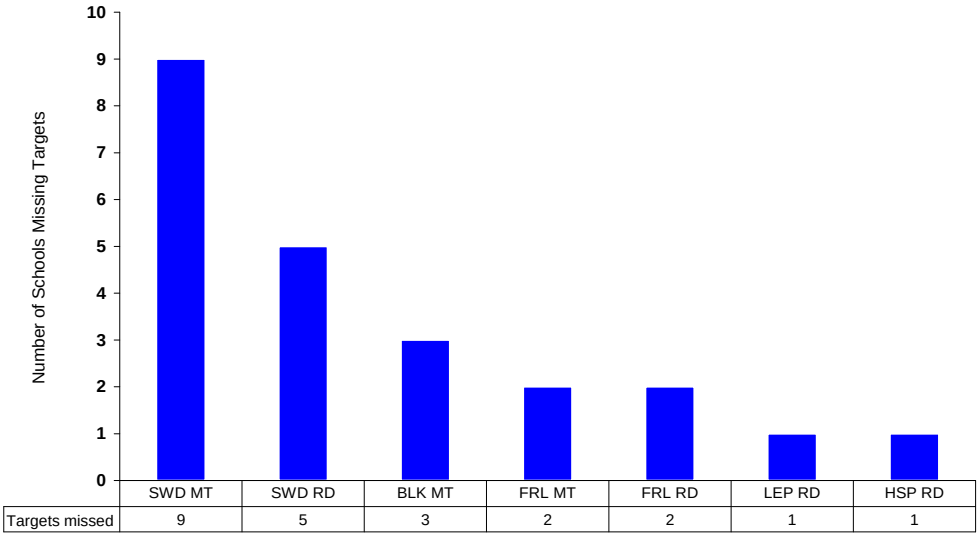


	SWD MT	FRL MT	SWD RD	FRL RD	HSP RD	BL RD	TOT RD	BL MT	LEP RD
Targets missed	8	6	5	3	3	2	1	1	1

Note: 1. MT = mathematics; RD = reading
2. 30 tested AYP targets were missed overall.
Interpretation Example: 8 high schools failed to test 95% of their AYP SWD math students

Of the reading and mathematics targets missed, SWD represented the largest group (14 of 23, or 61%). Mathematics targets were missed more often than reading targets with these students with disabilities. The other targets missed were spread across Black/African American, FRL, LEP, and Hispanic/Latino groups, with 1- 4 targets missed per subgroup.

Figure 57
Number of Schools Missing AYP Reading and Math Targets by Subgroup, 2006-07



	SWD MT	SWD RD	BLK MT	FRL MT	FRL RD	LEP RD	HSP RD
Targets missed	9	5	3	2	2	1	1

Note: 1. MT = mathematics; RD = reading
2. 3 reading or mathematics AYP targets were missed overall.
Interpretation Example: 9 high schools missed the AYP SWD math target

The number and percentage of WCPSS high schools making AYP declined in 2006-07 compared to 2005-06. This is likely due to two new tests with more difficult standards being used for the first time. As in past years, the targets high schools were most likely to miss involved students with disabilities (SWD) and students eligible for free or reduced-price lunch (FRL). Mathematics targets were more difficult for high schools to meet than reading targets in 2006-07, opposite the pattern seen in 2005-06.

One future challenge is the raising of targets in 2007-08 to 80.5% in mathematics and 56.9% in reading. Another challenge is the continued growth in the number of students with limited English proficiency (LEP) in WCPSS high schools (see the Demographic Trends section of this report for more information). Over time, these increased numbers will mean more high schools will add AYP targets for LEP students. At the elementary and middle school levels, AYP targets for LEP students are among the most difficult for schools to meet.

School District Status

School systems overall are also assessed relative to NCLB standards. The district is held accountable for any subgroup with at least 40 students or 1% of tested students which ever is greater. Despite meeting over 86.8% of targets (66 of 76), WCPSS stayed in Title I "district improvement" status for the second year. This was because one or more reading targets were

missed in all three grade spans (3-5, 6-8, and 10) for three consecutive years (2004-2005, 2005-2006, and 2006-07). Only three of North Carolina's 115 systems are not in district improvement at this time, indicating how difficult it is to meet state standards with every subgroup on every test. A systemwide plan for improvement is being implemented in response, as required by federal law.

EFFECTIVE PRACTICES

In this section, we summarize recent high school studies which address practices used by teachers who are more effective in promoting student learning in the required EOC areas. It is our hope that these findings can help to address some of the achievement gaps detailed in this report. We first provide a summary of common practices found across studies, followed by brief summaries of the individual high school studies.

Common Practices of Effective Teachers: A Look Across Cases (Holdzkom, 2008)

The Issue

Anyone who has spent time in schools, either as a student, teacher, or principal, has observed that some teachers are more effective than others. Some teachers are able to produce more learning in their students than others, just as some teachers are able to cope with especially badly behaved pupils, or are able to "bring out" the real learner from a shy student. What, then, makes some teachers more effective—however we define it—than others?

Early Research Efforts

Beginning in the 1960s and continuing for about 25 years, groups of researchers began to study the problem of effectiveness with great intensity. They assumed that there were behaviors that effective teachers were more likely to engage in than their less effective colleagues (Medley, 1979). If these behaviors could be identified and then taught to prospective teachers, it ought to be possible to create effectiveness, rather than simply witnessing it (Berliner & Tikunoff, 1976; Fisher et al., 1980). In many cases, these researchers carried out their investigations in real classrooms, using laboratory observational techniques to identify and isolate the behaviors that effective teachers used or used more frequently than their peers.

Eventually, some researchers themselves began identifying effective teachers. These researchers assumed that more effective teachers ought to be able to turn out students whose performance on achievement tests (usually of the norm-referenced variety) was better, in the aggregate, than the performance of students of other teachers (Brophy & Evertson, 1976, Evertson et al., 1980, Stallings & Kaskowitz, 1974). Thus, effectiveness and product became associated, with an objective definition of product (students' test scores) leading to an effort to isolate the causal variables or teacher behaviors.

Some of the researchers were interested in what were called "micro-skills". Mary Budd Rowe, for example, became interested in the amount of time that a teacher would allow a student to answer a question (Rowe, 1974). Rowe found that if she could get teachers to grant a little more time for a response, the quality of the student's answer was better (more elaborated, more often correct) than when the teacher insisted on rapid-fire responses.

WCPSS Studies

For the past several years, an important research activity carried out by members of the district's Evaluation and Research (E&R) department has studied the relationship between teachers and

schools who seem most successful in promoting student learning (as measured by improved achievement test scores over time) and teacher or school characteristics and practices. Each of the five high school courses required for graduation is being studied. High school and middle school Algebra, as well as high school Biology and U.S. History, have now been studied. A study of English I is underway (Haynie, 2006; Haynie, 2007; Haynie, 2008).

In each study, only teachers who had four years of data were included. Entry level skills of students were controlled for, as were certain demographic variables, so that teachers of generally weaker students were not penalized. Regression analyses identified which teachers' students showed the most and least improvement in scores from one year to the next. Once the teachers had been placed in rank order, observations of their classes were conducted by two staff members, one from E&R department and one from the district's Curriculum & Instruction (C&I) department. In addition to the observations, a survey of all teachers was administered to discover beliefs about teaching, about students, and about classroom conditions. Finally, focus group interviews were conducted. Eventually, a number of behaviors were identified that seemed to be used more frequently by the more effective biology teachers.

Common Practices of Effective Teachers

Certain practices have been identified across all the studies. It is not, of course, the case that the less effective teachers do none of these things, nor is it true that the more effective teachers do all of them. Nevertheless, it became clear that the more effective teachers were more likely to display some skills than was the case with their less effective colleagues. Among the skills reported in this series of research studies are the following five:

1. Purposeful use of time. More effective teachers realize that time is a precious commodity in the classroom. Beginning with the biology study, researchers from E&R discovered that effective teachers were extremely protective of the time they had for teaching. One teacher, for example, refused, whenever possible, to participate in school-wide committees, asserting that his students needed his time more.

Time-conscious teachers were more likely to plan lessons around purposeful activity, leaving fairly little time for discovery learning-type activities, spending less time on projects than did their less effective colleagues, and keeping control of the class, teaching from "bell to bell", with few digressions. By controlling time, the more effective teachers are able to ensure that all elements of the curriculum are covered. The logic here is incontrovertible. The state curriculum is correlated to tests students will complete. Behaviors like creativity, divergent thinking, and synthesis, while desirable, play a smaller role here. Therefore, teachers who ensure that students learn the curriculum well are more likely to find that students do well on the tests.

Less effective teachers were more likely to grant students "time off" for good behavior, were more likely to allow students to work on homework during class time, and were more likely not to plan enough activity to fill the available time.

2. Focus on the curriculum. More effective teachers stuck to the curriculum as outlined in the *Standard Course of Study*, the statement of learning goals and objectives promulgated by the

North Carolina Department of Public Instruction. While the Standard Course specifies the goals and objectives, the methods and materials to be used in conveying that material are left up to teachers. While the state (and the district) has a formal textbook adoption process, it is made clear to all teachers that the textbook is NOT the curriculum. Rather, it is expected that the teacher will design and present a sequence of lessons that will allow students to learn the prescribed goals and objectives.

In our studies, it became clear that this focus on the specified learning objectives distinguished effective teachers from less effective teachers. This was especially clear in the algebra study. Both the most effective and less effective teachers were asked in the survey and focus group interviews whether their students came into algebra knowing the prerequisite skills. Most teachers, regardless of effectiveness, tended to state that such was not the case. However, the effective teachers handled in-class remediation differently from the less effective teachers.

When the less effective teachers found that a large number of students did not possess the prerequisite skills, they essentially stopped teaching algebra and went back to teach the basic operations and skills that they believed should already have been learned. In essence, they abandoned algebra in favor of more fundamental mathematics. By contrast, the more effective teachers taught just enough of the needed skill to enable the students to understand the algebra objective that was being taught. In this way, they not only saved time, but they kept their focus on teaching algebra.

3. Effective teachers planned together and held one another accountable for sticking to the curriculum. One of the ways in which effective teachers kept their focus on the curriculum was through the use of joint planning activities. While this was not observed in every situation, effective teachers were more likely to indicate that they planned their lessons with their colleagues than was the case for less effective teachers.

In some high schools, teachers within a department stated that there existed a system for supporting new teachers of the subject as well as veterans. In some cases, this was a department-wide agreement to use common formative assessments at specified intervals. Thus, all the classes stayed on schedule so that students would be ready for the assessments. In other cases, the teachers all agreed to assign comparable homework. While teachers were free to teach the objectives in whatever way seemed best for them, all students were expected to complete the same homework assignments on the same schedule.

4. Classroom climate of positive affect. One of the differences among more and less effective teachers was the climate in their classrooms. Effective teachers established a friendly, but not familiar, environment in which students appeared willing to take some risks, to expect their teacher to be supportive while maintaining high expectations for student performance, and in which a little humor was employed. Less effective teachers often, but not always, seemed willing to express their displeasure with a student's performance, appeared to be more willing to scold students, and/or were less likely to allow students the freedom to make mistakes. Rather than seeing mistakes as incomplete learning, less effective teachers appeared to see mistakes as evidence of deficiency. In focus group interviews, the less effective teachers seemed more willing to articulate their belief that students didn't try, weren't prepared to learn, or were the

adversary. Comments of this kind were never heard in the interviews with more effective teachers.

5. Willingness of the teacher to adapt to students' needs. When asked "Do you think all children can learn?" virtually no teacher we encountered said "No." However, their actions sometimes belied this sentiment. High school teachers in our studies observed that students had not mastered pre-requisite skills. In the U.S. History study, for example, more and less effective teachers both acknowledged that many students lacked necessary reading skills. Effective teachers, however, devoted time to teaching students how to read history texts, maps, and timelines; less effective teachers did not. In the Algebra 1 study, most teachers also stated that students did not have the pre-requisite mathematics skills. More effective teachers provided mini-lessons to build the minimum prerequisite skills needed to enable students to understand the lesson objectives. Less effective teachers departed from the curriculum and focused on teaching the prerequisite skills exclusively, devoting time to objectives not included in the curriculum.

The practices, skills, and attitudes of more effective teachers in our studies are not new discoveries. While many teachers and others may assert that "All good teachers know this", the fact remains that the less effective teachers that we observed did not employ these skills, or did not employ them consistently. While it has been relatively easy to isolate and describe these skills, it will be somewhat less easy for all teachers to incorporate these into their normal repertoire. Yet, without such incorporation, it seems hard to believe that all teachers will be effective or that all students will get the kind of instruction to which they are entitled.

We will continue to analyze results and add to these generalizations as we move ahead with more studies. The new directions we have undertaken can result in findings that can greatly impact school and systemic improvement for the education of boys and girls.

U.S. HISTORY STUDY (Haynie, 2008)

Purpose of the Study

In 2006-07, 74.2% of the U.S. History students in Wake County Public Schools (WCPSS) were proficient on the North Carolina End-of-Course (EOC) U.S. History exam. The rate for White students was 85.5%, but only 49.3% for Black/African American students. Students who entered a North Carolina high school in 2006-07 must not only earn a U.S. History credit, but must also pass the North Carolina State EOC exam to graduate (North Carolina Department of Public Instruction [NCDPI], 2007b). It is of increasing importance that history teachers implement instructional practices that ensure success for all students, because of the importance of passing this course and also the state EOC exam.

This research study had two main objectives:

- Study, improve, and implement a WCPSS Value-Added Instructional Improvement Analysis Model.
  - ► Collect WCPSS-specific data that will help teachers, school, and district leadership understand their current practices in U.S. History.
  - ► Identify and share best teaching strategies in U.S. History that are linked to high student achievement.

- Contribute to a series of studies that identify targets for overall systemic improvement.
  - ► Identify the role of teachers, academic departments, principals, schools, and central services' administrators in the school improvement process.
  - ► Identify the practices of effective improvement.

Methods & Analysis

In 2005-06, there were 90 high school U.S. History teachers at the 19 WCPSS high schools that tested students in U.S. History. Twenty-nine teachers (32% of the 90 teachers) had taught U.S. History in 2001-02, 2002-03, and 2005-06 and were teaching in 2006-07, which made them eligible for this study. For these 29 teachers, the average student residual was calculated for 2005-06, for combined 2001-02 and 2002-03, and for all three years. The teachers were ranked on teacher effectiveness from highest to lowest using the 2005-06 averages. The comparison of these rankings to the earlier and combined averages confirmed the consistency of the new test rankings with the previous test rankings. The teachers with the ten highest 2005-06 residual averages were labeled T1-T10 and the teachers with the ten lowest averages were labeled B1-B10. The practice of these 20 teachers became the ultimate focus of this study.

In addition to these student achievement scores, three other types of data were collected for this study. First, a survey was prepared and distributed to all 29 teachers with three years of residual scores. The teachers answered 41 written survey questions concerning preparation, planning, use of time, schedules, use of data, and student interaction.

Second, one of the two principal investigators for this study observed each of the 20 teachers identified as most effective ("top teachers") or least effective ("bottom teachers").

Third, school and teacher focus-group interviews were conducted. There were two school focus groups: one at a school with a high 2005-06 school effectiveness index, and one at a school with a low 2005-06 school effectiveness index. There were also teacher focus-group interviews of the top teachers and the bottom teachers. The same questions were explored at all four focus-group interviews (see full report for explanation of residuals at: http://www.wcpss.net/evaluation-research/reports/2008/0705effective_us_history.pdf).

Results/Teacher Effect

This study found that the most effective teachers had a more complete package of rigor, relevance, and relationship strategies than less effective teachers. Effective teachers had strong

content knowledge, prepared their own materials, taught reading and note taking skills, used time wisely, and connected history to themes across time. Relationships with students were of utmost importance to effective teachers. They gave frequent positive feedback and believed that all students could succeed. Effective teachers created an atmosphere of mutual respect where teachers and students were enthusiastic.

Conclusion

The top teachers of this study expected **all** students to perform at a high level. During observations it was clear that students understood this expectation and had made it their own.

In contrast, bottom teachers had classrooms where low expectations were the norm. Memorizing facts was good enough. Answering low-level questions was the work of the students, while the teacher might lecture on the overall meaning. The purpose of the work was to be able to answer EOC questions. If a student could not read or take notes well, the solution was for the teacher to talk more. Students could choose to sleep or not participate. A common belief among bottom teachers was that there was no time because of the high school block schedule.

The observations made it clear that the attitude that the teacher holds is the attitude that the students adopt. It was also clear that students in WCPSS can achieve more than some teachers expect of them. The interviews and observations showed that most of the bottom teachers liked students and thought they were doing their best to help them succeed. They all reported on the survey that they viewed themselves as successful. It is hoped that sharing the success and attitude of the top teachers will help all teachers catch a vision of what is possible.

HIGH SCHOOL BIOLOGY STUDY (Haynie, 2006)

Purpose of the Study

Of the five core EOC courses, Biology had the 2nd largest enrollment in 2004-05. In 2004-05, WCPSS made Expected Growth in Biology but not High Growth. Biology also has the largest White-Black achievement gap among all EOC tests (see the EOC Results section of this report). One of the primary goals of the study was to identify the most successful WCPSS Biology teachers, based on EOC results over time.

Methods & Analysis

Forty-three teachers who had taught Biology for 4 consecutive years from 2001-02 to 2004-05 were chosen for the study. After analysis, the 10 most effective and 10 least effective teachers were identified based on average student residuals. Comparisons of surveys, observations, student scores, and interview results of the top and bottom teachers were made.

Results

Comparisons between top teachers and bottom teachers were not easy. There was variance between teachers and exceptions to every generalization made. In general, however, the top Biology teachers:

- Were clustered in 7 schools, bottom teachers were in 7 schools, and 2 schools had both top and bottom teachers;
- Averaged 83.4% of their assigned instructional time teaching Biology while bottom teachers averaged 64.7%;
- Focused class time in lecture and lab, while most bottom teachers used little lecture, more projects, and partner activities;
- Planned their own lessons, (did not use provided activities in pacing guides) collaborated with other teachers, and used data frequently; and
- Were not necessarily teaching the highest-achieving students in terms of performance levels.

Survey results indicated that the top effective teachers:

- Focused on Biology (e.g., often did not teach other subjects),
- Used data,
- Studied/planned with each other,
- Focused students' time on Standard Course of Study goals, and
- Maximized student time and resisted other school duties.

Observations of successful Biology teachers showed:

- They planned together as a group,
- They had students review selected EOC content,
- They made data-driven decisions,
- They conducted frequent assessments,
- They made students aware of their progress,
- They had "year at a glance" documents,
- They were well dressed, and
- They were in a school with strong departmental leadership.

Conclusions

It is possible to identify teachers who consistently help students achieve high growth. Results of analysis of Biology data for the year after the study was completed (2005-06) demonstrated that the top teachers and bottom teachers from the previous four years pertaining to the original study were still largely the same. System-level recommendations include organizing system/school-wide mandatory EOC support groups and provide structure for meetings, disaggregating average residuals, and studying top performing teachers further. School-level recommendations include focusing EOC teacher time on instruction in that EOC subject, use of common planning time for EOC teachers, and more sharing of effective practices across schools.

HIGH SCHOOL ALGEBRA I STUDY (Haynie, 2007)

Purpose of the Study

Algebra 1 is a high school graduation course requirement for most students, and the entering high school class of 2006-07 must pass the corresponding state EOC test in order to earn a diploma. In 2005-06, 87.3% of the 7,211 WCPSS students who took the high school Algebra 1 End-of-Course (EOC) test scored proficient. In WCPSS, most students score in Level III (proficient) or in the lower ranges of Level IV (above grade level). Few students score in the top half of Level IV.

In order to investigate teacher-related factors related to high performance in Algebra I, this project collected data to help teachers and district leadership understand current Algebra 1 practices, identify and share best practices in Algebra 1, build a series of studies that identify the role of teachers, and other system staff/departments in the school improvement process, and identify the practices of effective improvement.

Methods & Analysis

Forty-one (26%) of the 157 WCPSS high school Algebra I teachers in 2005-06 were identified for the study because they had also taught Algebra I for each of the prior three years. The analysis identified the nine most and nine least effective teachers based on average student residuals. These residuals are essentially the difference between a student's EOC scale score and the expected scale score of similar WCPSS students (a forthcoming full report on this study will include a detailed explanation of residuals).

Results/Teacher Effect

There was little difference between top teachers and bottom teachers' experience levels as Algebra I teachers. Compared to bottom teachers, the top teachers:

- averaged more instructional time spent on new material (68%; bottom teachers 36%);
- set their own pace;
- remediated within the context of presenting new material (instead of stand-alone remediation);
- spent more time in technology and small groups;
- planned more with other teachers;
- stressed linear regression and problem solving more often;
- sought to learn of others' programs;
- shared ideas for improvement, while bottom teachers were more concerned with personal and management problems.
- communicated student expectations clearly;
- were more purposeful with homework; and
- had an atmosphere of mutual respect in class.

Behaviors in Top Schools

Top schools in terms of Algebra I performance had a strong experienced course leader and support structures were in place for all teachers, with special considerations for new teachers. The schools had a school-wide plan that was aligned to the standard course of study. Materials were ready for the entire school year, and materials and class time were used thoughtfully.

Conclusions

Through this Algebra study methodology, it is possible to identify teachers who are successful with students at all levels: Recommendations for teachers include focusing on the NC Standard Course of Study, using data to reflect on their practices and strategies, and to plan with other teachers. Recommendations for school leaders include the development of a school-wide plan for teaching Algebra, the sharing of data with teachers, and the development of a scheduling plan that maintains stability in terms of who teaches Algebra I and to whom while allowing for changes over time and teacher growth opportunities.

DISCUSSION

Many indicators of test performance, persistence, and academic rigor point toward the relative success of WCPSS high school students. Student achievement remains high compared to state and national results, and an increasing number of students are pursuing rigorous AP coursework in high school and taking the SAT. In addition, the skills and abilities that WCPSS graduates obtain appear to serve them well in the UNC system, which is the most common post-high school educational destination for WCPSS graduates.

Our biggest challenge is attaining the WCPSS vision that all students will graduate on time, prepared for the future, with the support of the broader community. This goal is becoming more difficult to attain primarily due to two factors—changes in the characteristics of the population served in WCPSS and increasing rigor in the state indicators and requirements. Results for 2005-06 and 2006-07 have begun to show negative trends in performance indicators compared to prior years.

In terms of demographic characteristics, the explosive growth being experienced in Wake County is well-chronicled, and it is putting significant strain on the school system's infrastructure. In addition to the overall strain of growth, many of the student subgroups who have historically had the most difficulty reaching standards–such as students with limited English proficiency and students from lower-income homes–represent the fastest-growing populations among the WCPSS student body. The challenges inherent in helping these students acquire the skills and knowledge they need to be successful therefore mount accordingly. Schools are exploring new strategies and approaches to support these students, but their sufficiency is not yet known.

In terms of state success indicators, critical factors that will influence our ability to have every student graduate on time relate to graduation standards and End of Course proficiency standards. Both are being raised simultaneously, making the path to graduation considerably more difficult for many students.

- Graduation requirements have been increased, including requirements to pass five EOC tests, their corresponding courses, and a graduation project. Beginning with the 9th grade class of 2006-07, nearly all students are expected to earn a passing score on five EOC tests in order to earn a diploma – Algebra I, English I, Biology, U. S. History, and Civics and Economics.

- At the same time, as the state launches new high school tests (namely U. S. History and Civics and Economics in 2005-06 and English I, Algebra I, Geometry and Algebra II in 2006-07), tests are being re-scaled and standards raised such that the passing rates on those tests are lower. The same process will play out with new tests in the science courses in 2007-08.

Early warning signs of possible declines in graduation rates are an increase in retention and dropout rates. Ninth grade traditionally has the highest retention and dropout rates. Students who experience failure early in their high school career will be less likely to finish their high school career without extra support and encouragement.

In 2006-07, retention rates and dropout rates both increased. The retention rate of ninth graders increased from 15% to nearly 20%. Thus, one in five ninth graders, and one in three high school LEP students, was required to repeat at least some of the courses from ninth grade. One-year dropout rates also crept up, from 3.9% in 2005-06 to 4.2% in 2006-07.

Changes in the testing standards have affected overall student outcomes at the high school level. EOC required tests all now have proficiency rates around 75%, meaning a minimum of one fourth of WCPSS high school students has experienced failure on one or more of these tests. While the intent may be to push students to perform at higher levels, it has resulted in putting more students at risk of not graduating.

As the standards are being reset on these tests, not only are the overall passing rates dropping, but they are dropping disproportionately. When standards are raised, it is those students who would otherwise be just "getting by" on those tests who are most dramatically affected. By and large, those students who are passing tests by small margins are more likely to come from the same subgroups which historically have a more difficult time passing those tests (i.e., Black/African American students, Hispanic/Latino students, and those with academic risk factors). Current passing rates on some of these tests are below 50% for several subgroups of students, including Black/African American students, students with disabilities, students from lower-income backgrounds, and students with limited English proficiency. Hispanic/Latino students fare only slightly better, with some test proficiency rates just over 50%. The achievement gaps among ethnic groups on all of the revised required EOC tests increased. Coincidentally, many of these same subgroups are the ones that are growing in number and proportion in the WCPSS student population, and who tended to have lower graduation rates and higher retention and dropout rates even before these new requirements were established.

As standards are being raised for students, so too are standards for schools under the state's accountability models for ABCs and AYP. While WCPSS continues to out-perform comparable systems, increased standards on new tests in English I and Algebra I negatively impacted schools' ability to meet both ABC and AYP standards in 2006-07. A more rigorous ABC growth model, implemented in 2005-06, resulted in fewer schools meeting growth standards than in the past. Slightly more schools met growth standards in 2006-07, but the percentage of schools earning state recognitions did not. AYP targets for both participation and achievement also proved tougher to meet. While the state may feel increased rigor on testing standards is important for North Carolina students, it makes it more difficult for schools and districts to meet the annual federal AYP requirements which have a fixed ultimate goal of 100% of students proficient by 2014. As a system, WCPSS is now in district improvement status, which is the case for all but three districts in the state.

The shifts in student population, rising standards on EOC tests, and new graduation requirements are all coming together to portend a kind of "perfect storm", the brunt of which is beginning to be felt. Knowing this, WCPSS has begun to engage in a variety of initiatives to identify and utilize effective strategies for working with students who are having difficulties meeting expectations in the classroom and on state assessments. At the same time, WCPSS must continue to challenge and accelerate learning for our brightest students.

In the face of these new circumstances, the type of effort that will be required to maintain and expand upon the high levels of achievement that have become the hallmark of WCPSS is unprecedented, and will have to encompass not just high schools, but schools at all levels in addition to significant community resources. WCPSS staff will have to work even smarter, not just harder. One key strategy that has been embraced is Professional Learning Communities, which promote assessing student learning in common ways across teachers, sharing results and strategies across teachers, and adjusting teaching based on assessment results. This strategy can lead to increased consistency, innovation, and student success. The E&R reports on effective practices for EOC courses also point to strategies such as purposeful use of time, a tight focus on required curriculum, common planning, positive climate in class, and adapting to student needs as valuable strategies as for effective instruction. Increasing consistent use of these strategies must be a goal.

An interesting shift in achievement patterns by gender across levels provides food for thought as WCPSS strives to improve. Why is it that boys outscore girls on all EOC tests except English I, while girls generally outperform boys at the elementary and middle school levels on EOG tests? Part of the answer may be that girls graduate at a higher rate than boys, so the lowest achieving boys are removing themselves from the pool. While the greater persistence of girls to get through high school may explain part of the achievement difference, motivational differences or reactions to instructional strategies may also play a part. How can we encourage boys to persist to graduation at the same time as we encourage girls to achieve their very best?

Ways of doing business which have served students' needs in the past may no longer be sufficient. WCPSS must continue to pursue new strategies to promote teaching and learning for all students, new ways of focusing resources, and new ways of reaching students and families in order to rise to the challenges that are looming on the horizon. Involving the community more effectively seems critical.

At the same time as we address these new standards, WCPSS staff should consider whether these are the right standards. Across the country, groups have called for a greater focus on "soft" skills (such as teamwork) and the acquisition of technical skills, and a de-emphasis on placing increasing numbers of students in the most advanced mathematics and science courses (Education Week, 2007). Within North Carolina, groups such as the Blue Ribbon Commission are pushing for reform in the number of tests required. WCPSS staff are well placed to enter this debate.

Finally, WCPSS staff should also consider defining more clearly what it means for students to "graduate on time prepared for the future." Does this mean all students graduating in four years? Does being prepared for the future include skills beyond those measured by course completion and passing EOC tests? Defining these terms could be helpful to staff on the front line in schools and to planning strategies to attain the goal. Early in high school, passing rates on EOC initial tests and retests, course grades, retention rates, and dropout rates can be monitored as early indicators of possible decreases in graduation rates. E&R is beginning a study on the status of students entering ninth grade in 2006-07.

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WCPSS HIGH SCHOOL STUDENT OUTCOMES 2006-07

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