

2006-07



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

Editor

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ABSTRACT

This report draws together various academic performance results for elementary students in WCPSS. Generally speaking, students in grades K-5 continue to do well on most literacy measures, but there has been a decline in mathematics EOG performance, largely resulting from the State Board of Education's action to create more rigorous cut scores for achievement levels. Analysis of student outcomes is provided at the grade level as well as for subgroups. This report describes demographic trends that impact our student outcomes as well as information about students retained in grade. Finally, the report provides summaries of several research and evaluation efforts related to effective practices for promoting student achievement.

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WCPSS ELEMENTARY STUDENT OUTCOMES 2006-2007

SUMMARY

This report summarizes overall trends in student outcomes for 2006-07 and over time for the Wake County Public School System (WCPSS). This includes not only a variety of testing results but accountability standards and promotion/retention rates. Findings related to effectiveness practices based on our research and evaluations are included in the final chapter.

BACKGROUND

Demographic Trends

The student population in WCPSS has been growing rapidly, with an increase of more than 31% since 2001. WCPSS is growing increasingly diverse, with an increase in the percentages of non-White, low income, and limited-English- proficient (LEP) students. The groups that have been growing more rapidly have typically shown lower achievement, increasing the challenge of improving achievement.

Achievement Outcomes—Literacy

Literacy results at the elementary school level include the local Kindergarten Initial Assessment (KIA) and K-5 assessments (which are locally developed and administered), plus the statewide End-of-Grade (EOG) tests of reading and mathematics, and the writing assessment, which is administered to students in grade 4.

KIA and K-5 Assessments: KIA results indicate that few students enter WCPSS already able to read, but many have strong pre-reading skills. Differences in skills among students from various ethnic and racial groups were evident as students entered kindergarten; Hispanic/Latino students had the lowest percentage of students able to demonstrate knowledge of six or more print concepts, followed by Black/African American students. A somewhat smaller percentage of male students than female students were able to identify six or more print concepts at the beginning of kindergarten.

On K-5 assessments, 84% of students in grades K, 1, and 2 demonstrated desired reading skills by Spring of 2007. Differences were evident by subgroup, with limited LEP students, Hispanic/Latino, SWD students, and students eligible for FRL having lower percentages of students reaching book level standards than students without these academic risk characteristics.

Most students in grades 2-5 (72%) scored proficient on reading strands, but lower percentages performed at or above grade level on expository and narrative assessments (63%), which tap both reading and writing skills. Results for these assessments are considerably lower than for the EOG reading test.

Slightly more than half (55%) of the students in grades 3-5 scored proficient in writing conventions, with almost three quarters of students (70%) showing mastery of writing content

based on a writing collection. Grade 4 performance on the state writing test was somewhat lower, with about 63% of WCPSS students scoring at or above grade level.

EOG--Reading: Generally, the percentage of students scoring at grade level on EOG reading tests has been increasing at the elementary school level since Spring of 2000, and achievement gaps have been closing.

- More than 90% of WCPSS elementary school students have scored proficient in reading for the last several years (91% in 2006-07). This is despite demographic trends that have increased the challenge. WCPSS proficiency is higher than that of the state overall (87%).
- The gap between White and Asian students compared to Black/African American and Hispanic/Latino students has been gradually closing since the Spring of 2000, but achievement gaps have been fairly stable since Spring 2003. The gap between White and Asian students compared to Black/African American and Hispanic/Latino students in 2006-07 was still about 14 to 18 percentage points.
- The percentage of female students who scored proficient was higher than for male students.
- Lower percentages of FRL, SWD, and LEP students score proficient on the EOG reading test; those with only one of these characteristics score closer to the district's overall results than do those with more than one of these characteristics.

Writing: WCPSS writing results at the elementary school level (grade 4) show results above the state level but with room for improvement.

- For the past four years, WCPSS proficiency rates on the state's grade 4 Writing Test results have consistently been higher than those for the state as a whole. In 2006-07, almost 63% of WCPSS students in grade 4 scored proficient versus 53% statewide.
- Across all assessments, WCPSS students were least likely to be successful on the state writing test. Writing results often impact schools' status on the ABCs of Public Education Accountability model (ABCs) negatively.
- Among various student subgroups in WCPSS, Asian, White, and female students were the only groups to reach a proficiency rate at or above 70% in 2006-07. The lowest proficiency rates in 2006-07 were found among the FRL, SWD, Black/African American, and Hispanic/Latino subgroups, all of whom had rates lower than 50%. Female students (70% proficient) outperformed male students (55% proficient) at grade 4.
- Except for Asians, all student subgroups showed improvements in 2006-07 over the previous years.

Achievement Outcomes—Mathematics

EOG Mathematics: As in reading, the percentage of students scoring at grade level in mathematics had been increasing through 2004-05, but the mathematics EOG tests used at grades 3-8 brought more rigorous standards set by the State Board of Education in 2005-06, resulting in lower overall proficiency, and larger gaps by ethnicity and academic risk groups. However, in 2006-07, a slight rebound effect across all disaggregated populations was evident.

- Across grades 3-8, results for 2006-07 show the mathematics proficiency standard is more difficult to meet than the reading standard. In reading, 91% of students scored proficient, while 76% scored proficient in mathematics.
- At grades 3-5, 78% of WCPSS students scored proficient in mathematics. Higher percentages of WCPSS students in grades 3-5 scored at grade level than was true statewide (69%).
- By ethnicity, the percent proficient ranged from 56% to 94%, much wider than was true with the old test and standards. The gap between White and Black/African American students, for example, was 34 percentage points in mathematics in 2006-07. Large gaps were also evident between students who were low income, had disabilities, or had limited English proficiency (LEP) and the overall population in WCPSS.
- All ethnic groups, however, showed larger percentages of students proficient in mathematics in 2006-07 than in the previous year, with the largest gains made by Black/African American and Hispanic/Latino students.

Promotion/Retention Rates

WCPSS students are promoted at a high rate, but differences exist in the percentage of students promoted by grade level, ethnicity, academic risk factors, and gender.

- As of the end of the 2006-07 school year, 95.4% of WCPSS' students K-12 were promoted to the next grade level, while 4.6% were retained (5,856 students).
- High school had the highest retention rates, especially at grade 9 (19.5%), but also at grades 10 (10.7%) and 11 (7.3%).
- Elementary had the next highest retention rate, especially at Kindergarten and grade 1 (4.2% and 4.7%, respectively).
- 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.

ABCs Results

During 2006-07 at the elementary school level, most schools met growth standards (85%) an increase of 8% from 2005-06. The percentage of schools that met high growth increased by 13 percentage points between since 2005-06. The number of elementary schools receiving the highest recognitions bounced back after a drop in 2005-06 because of the new formulas used to calculate growth, the inclusion of writing, and more rigorous mathematics standards. There were a total of 50 schools in the top three categories, 11 more than in 2005-06.

- Only 9 of 93 elementary schools (9.7%) in WCPSS were able to reach the highest standard of Honor School of Excellence or School of Excellence.
- The most common recognition in 2006-07 was School of Distinction (41 schools) or School of Progress (29 schools). In 2005-06, 35% of WCPSS elementary schools were Schools of Distinction, while 33% were Schools of Progress. This increase is probably a result of the improvements in the percent of students scoring at/above grade level in mathematics, as well as the improvements on the 4th grade writing test.

AYP Results

Federal AYP standards associated with NCLB also became more difficult to meet in 2006-07 with the change in mathematics level scores.

- Overall, 51% of WCPSS elementary schools met AYP by meeting all of their targets, compared to 53% in 2005-06.
- Mathematics targets were missed more often than reading targets. Targets were most likely to be missed for the Black/African American, SWD, and FRL groups.
- Schools with fewer targets were more likely to meet AYP standards. Of elementary schools with 14 or fewer targets, 93% met AYP.
- Across the elementary, middle, and high school levels, despite meeting over 86% of the targets (66 of 76), WCPSS continued to be in systemwide improvement. This was because reading targets were missed in all of three levels (3-5, 6-8, and 10) for three consecutive years (2004-2005, 2005-2006 and 2006-07). A systemwide plan for improvement is being implemented. Only three school districts in North Carolina have avoided moving into District Improvement as a consequence of failure to achieve AYP at the district-level.

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 elementary school outcomes. The purpose of this report is to provide those interested in elementary 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 middle and high 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, as well as the report prepared at the end of 2005-06, 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 mathematics.
- 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 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 (EOG 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 EOG 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.

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 2007 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, more than 30,450 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.

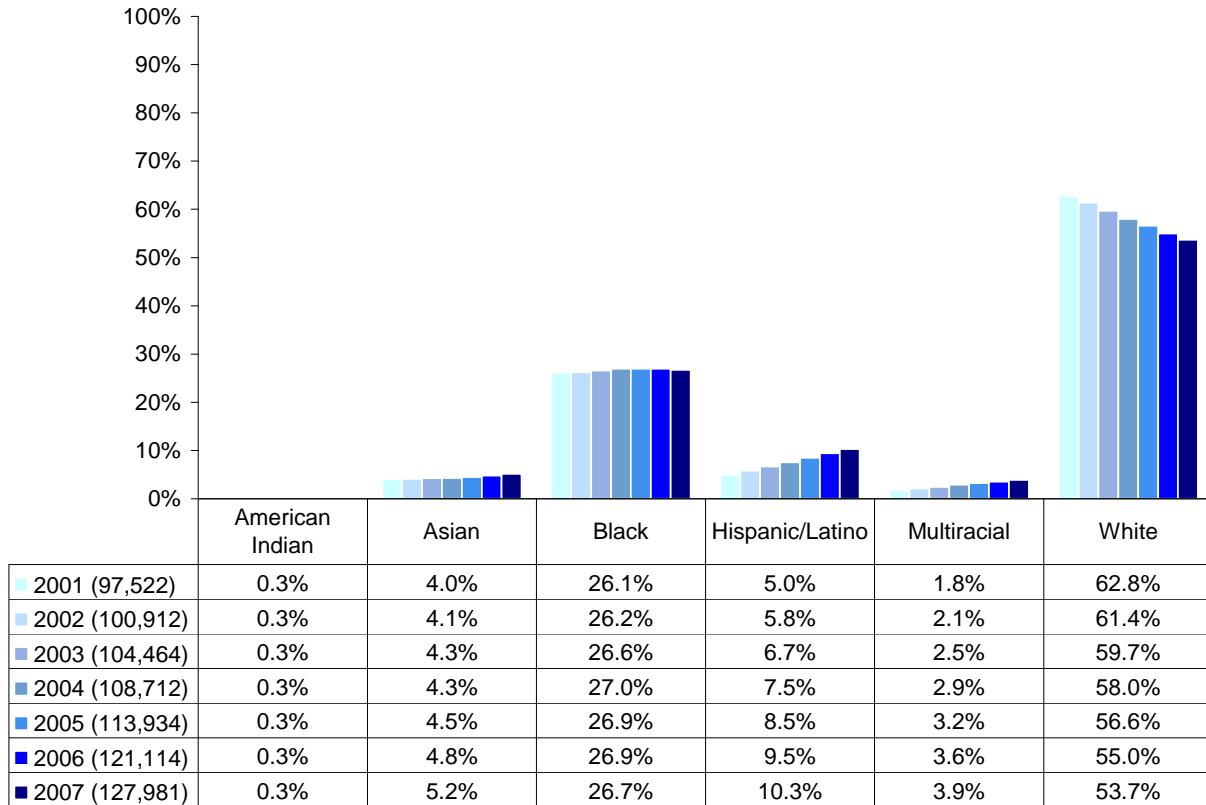
Table 1
Students by Ethnicity, Spring 2001 to Spring 2007, Grades K-12

	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



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), SWD students, and/or students who receive 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. While 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 manifested physically (blindness, hearing loss, etc.) or psychologically (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 updated.

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, 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. An 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 (4th to 5th, 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 academic 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 and there was 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 to Spring 2007, Grades K-12

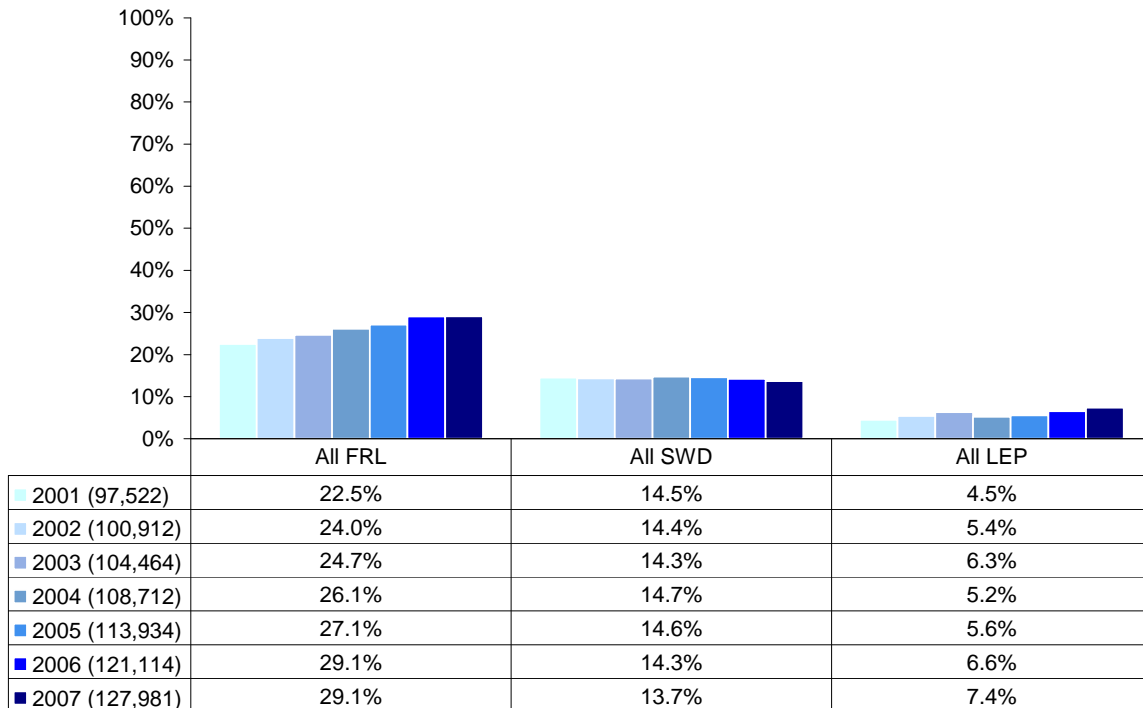
	2001	2002	2003	2004	2005	2006	2007
All FRL	21,959	24,172	25,782	28,428	30,881	35,195	37,215
All SWD	14,179	14,483	14,948	16,025	16,630	17,264	17,508
All LEP	4,398	5,451	6,610	5,659	6,371	7,989	9,478
FRL and LEP	2,686	3,455	4,157	3,801	3,982	5,429	6,172
FRL and SWD	4,806	5,134	5,320	5,851	6,050	6,752	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 if they qualify in more than one category (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 to Spring 2007, Grades K-12



Note: Duplicated counts.

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

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 male students is always larger than the number of female students (except for Asian students who qualify for SWD and FRL designation) and in some comparisons is approximately double that of female students.

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.

Elementary Enrollment Trends over Time

By Ethnicity (Grades K-5)

Elementary growth patterns are similar to those for K-12 overall. Between Spring 2001 and Spring 2007, there was more than a 29% increase in the elementary school population. As Table 4 shows, numbers of elementary students increased for all ethnic groups between Spring 2001 and Spring 2007. For most ethnicities, the numbers have increased each year. The numbers of White and American Indian students dropped in 2002 and 2003, but have steadily increased since 2003.

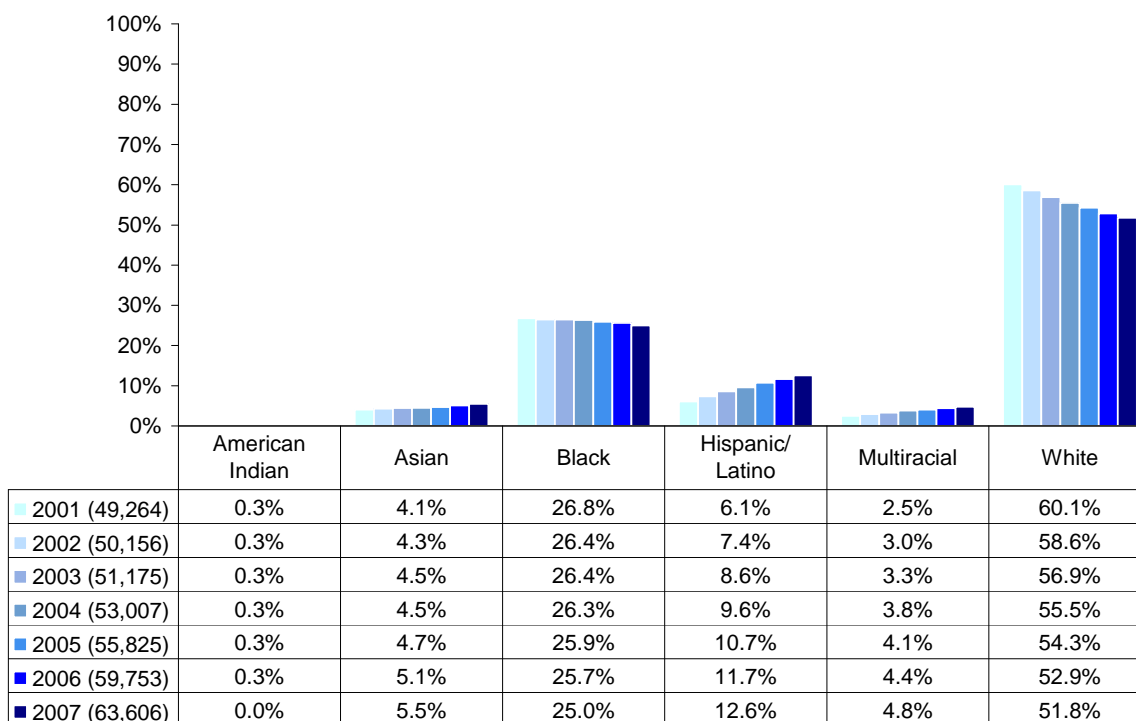
Table 4
Students by Ethnicity, Spring 2001 to Spring 2007, Grades K-5

	2001	2002	2003	2004	2005	2006	2007	Net Increase
American Indian	158	147	143	144	146	166	170	12
Asian	2,029	2,164	2,290	2,409	2,622	3,056	3,498	1,469
Black/African American							15,908	
Hispanic/Latino	13,202	13,266	13,528	13,962	14,477	15,330	8,040	2,706
Multiracial	3,010	3,705	4,400	5,079	5,994	6,967	3,059	5,030
White	1,241	1,485	1,704	2,013	2,296	2,646	32,931	1,818
White	29,624	29,389	29,110	29,400	30,290	31,588	32,931	3,307
All WCPSS Elementary	49,264	50,156	51,175	53,007	55,825	59,753	63,606	14,342

Data Source: Analysis of WCPSS Student Locator annual May data

While Table 4 above shows that all ethnicities have increased in number, Figure 3 indicates that there have been growing percentages of Hispanic/Latino, Multiracial, and Asian students in WCPSS at the elementary level. With these three groups growing at a faster pace, Black/African American and especially White students are decreasing in percentage of the overall membership.

Figure 3
Student Population by Ethnicity, Spring 2001 to Spring 2007, Grades K-5



Data Source: Analysis of WCPSS Student Locator annual May data

Interpretation Example: In 2006-07, Black students comprised 25.0% of K-5 student population, compared to 26.8% in 2000-01.

By Academic Risk Factor (Grades K-5)

More than 14,300 additional students have entered WCPSS elementary schools since 2001, a 29% increase. Table 5 shows the number of elementary students in membership by FRL, SWD, and LEP risk factors in the spring of each year as well as combinations of these academic risk factors. In each year, FRL students outnumbered students with other risk factors, followed by those students with the SWD academic risk factor.

It should be noted that even though the numbers of elementary school students in multiple academic risk categories are small, all of the academic risk factor groups except one (the FRL/SWD combination) increased faster since 2001 than the increase in the general population (see Table 5). In fact, several risk combinations more than doubled in number (FRL and LEP; LEP and SWD, and FRL & LEP & SWD). These patterns indicate that the percent of students at risk is growing rapidly, presenting new challenges for schools.

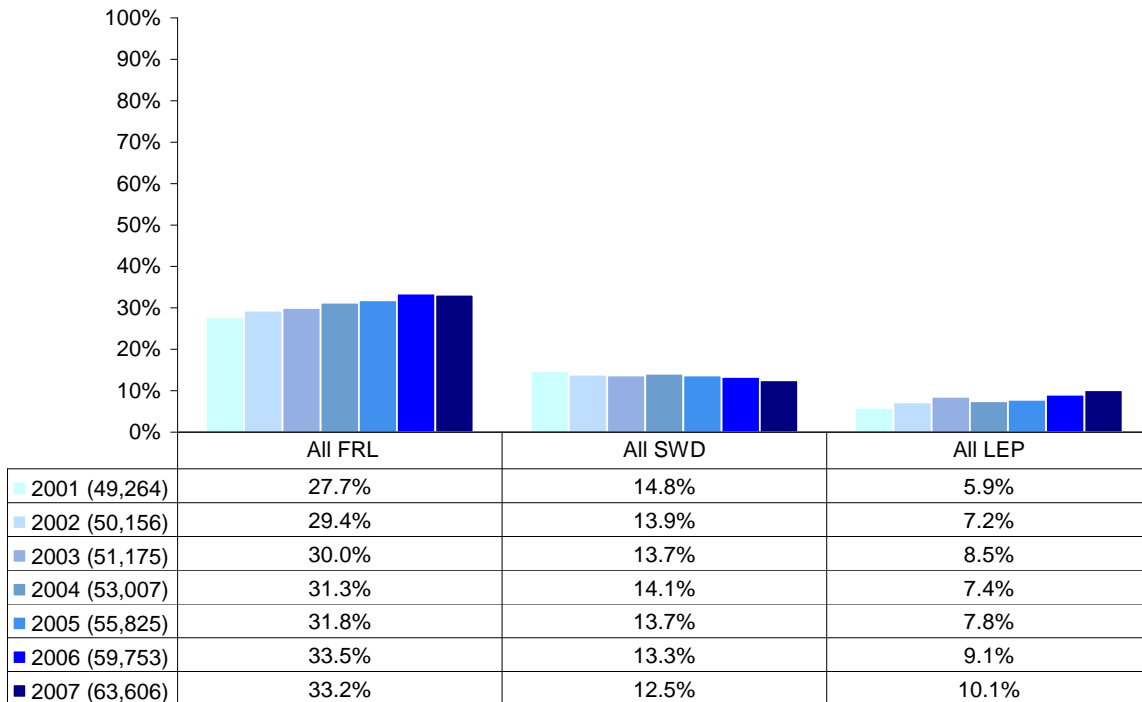
Table 5
Number of Students by Academic Risk Factor, Spring 2001 to Spring 2007, Grades K-5

	2001	2002	2003	2004	2005	2006	2007
All FRL	13,657	14,721	15,336	16,569	17,764	20,000	21,105
All SWD	7,287	6,964	6,986	7,455	7,634	7,959	7,967
All LEP	2,884	3,604	4,366	3,944	4,344	5,421	6,423
FRL and LEP	1,866	2,413	2,925	2,718	2,718	3,795	4,338
FRL and SWD	2,630	2,651	2,646	2,881	2,881	3,214	3,101
LEP and SWD	49	63	87	78	78	74	117
FRL & LEP & SWD	153	222	288	324	324	388	504
All WCPSS Elementary	49,264	50,156	51,175	53,007	55,825	59,753	63,606

Note: For 2007: FRL only $n = 13,162$; SWD only $n = 4,245$; LEP only $n = 1,464$
Data Source: Analysis of WCPSS Student Locator annual May data

Figure 4 displays the percentage of the overall elementary population each year by FRL, SWD, and LEP academic risk factors. The graphic indicates a marked, steadily increasing percentage of FRL students, with a smaller increase for LEP students, and little change for SWD students.

Figure 4
Percentage of Student Population by Academic Risk Factor, Spring 2001 to Spring 2007, Grades K-5



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

Interpretation Example: In 2006-07, 33.2% of all students in grades K-5 were identified as FRL students.

Table 6 shows the percentage of students at the elementary level by gender over different academic risk categories. Of note, the data indicate approximately twice as many Male students as female students in almost every risk factor where SWD was involved, a difference not evident in the other academic risk factors.

Table 6
Students with Risk Factors by Gender and Ethnicity, Grades K-5, Spring 2007

		Amer. Indian	Asian	Black	Hispanic/ Latino	Multi- Racial	White	Total
FRL	Female	22	251	5,212	3,079	532	1,380	10,476
	Male	33	242	5,142	3,191	508	1,513	10,629
	FRL Total	55	493	10,354	6,270	1040	2,893	21,105
SWD	Female	7	46	890	268	125	1,206	2,542
	Male	14	91	1,820	578	243	2,679	5,425
	SWD Total	21	137	2,710	846	368	3,885	7,967
LEP	Female	1	343	136	2,413	43	167	3,103
	Male	1	415	143	2,505	52	204	3,320
	LEP Total	2	758	279	4,918	95	371	6,423
FRL-SWD	Female	4	2	688	74	67	194	1,029
	Male	9	4	1,378	161	102	418	2,072
	Total	13	6	2,066	235	169	612	3,101
FRL-LEP	Female	1	104	93	1,922	20	51	2,191
	Male	0	98	102	1,863	19	65	2,147
	Total	1	202	195	3,785	39	116	4,338
SWD-LEP	Female	0	10	3	19	3	7	42
	Male	0	16	2	40	3	14	75
	Total	0	26	5	59	6	21	117
FRL-SWD-LEP	Female	0	7	9	147	2	4	169
	Male	0	8	13	305	4	5	335
	Total	0	15	22	452	6	9	504

Note: Top section represents duplicated counts; bottom section represents unduplicated.

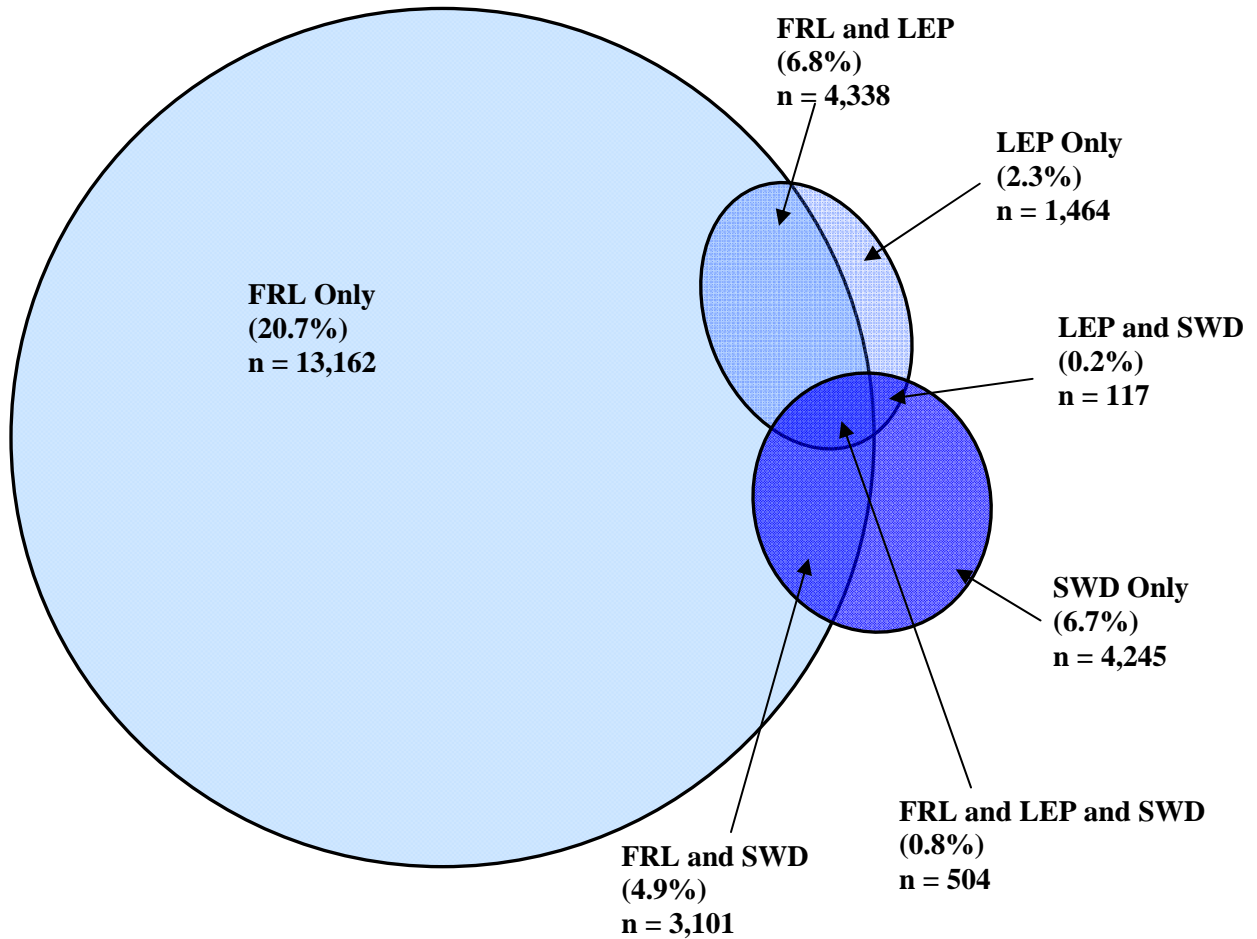
Data Source: May 2007 Student Locator.

Multiple Academic Risk Factors

Figure 5 displays the distribution of FRL, SWD, and LEP students at the elementary school level. As of the end of the 2006-07 school year, 26,931 (42%) of elementary school students were identified as FRL, SWD, and/or LEP. Of these, the most common academic risk factor was FRL for 21,105 students (33%); 7,967 (12.5%) were SWD, and 6,423(10%) were LEP. About 12% of these students had two of the characteristics. Fewer than 1% of these students were identified as having all three of the academic risk characteristics.

- Of the 33% FRL students in WCPSS, most (21%) were identified as having FRL as a single academic risk characteristic; 5% were identified also with SWD as an additional risk factor, as were 7% identified with LEP as an additional academic risk factor. Another 1% had all three of the academic risk characteristics.
- Of the 13% SWD students in WCPSS, 7% were identified as having SWD as a single academic risk characteristic; another 0.2% were identified with LEP as an additional academic risk factor.
- Of the 10% LEP students in WCPSS, 2% were identified as having LEP as a single academic risk characteristic.

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



N=63,606

Data Source: May 2007 Student Locator

TESTING OUTCOMES—LITERACY

KINDERGARTEN INITIAL ASSESSMENT RESULTS

Kindergarten students are assessed during the first few weeks of the school year to diagnose strengths and needs and to help teachers plan instruction. Students are assessed with the Kindergarten Initial Assessment (KIA) in the areas of literacy, mathematics, physical, and personal/social skills. Most assessments are carried out as instructional tasks in centers or based on teacher observations over time. The greatest amount of assessment time is spent on literacy, in a Literacy Center or Language Arts Center (as described below).

- **Literacy Center** – Students complete tasks related to concepts of print, retelling a story, and word identification.
- **Language Arts Center** – Students complete the following tasks:
 - ▶ **Letter Identification** –Identifying upper and lower case letters (all students)
 - ▶ **Letter Sound** –Identifying letter sounds (for students who identify 26 upper or lower case letters)
 - ▶ **Phonological Awareness Skills Test (PAST)** – Assessing Concept of Spoken Word, Rhyme Recognition, Rhyme Production, Syllable Blending, and Syllable Segmentation (all students) plus Syllable Deletion, Phoneme Isolation – Initial Sounds, and Phoneme Isolation – Final Sounds (for those mastering first five tests).
 - ▶ **Oral Language Checklist** – Measuring conversational skills on a checklist during the KIA and the first two weeks of school (all students).

Results for the other areas of the KIA are reported in the mathematics section of this report. All data reported here came from summary files created by E&R's testing office in the fall of 2006 based on teachers' submissions through an electronic survey process.

The KIA measures skills that students typically have upon entry to kindergarten; other skills that are measured are more advanced. Results for 2006-07 show that most students entering kindergarten in WCPSS demonstrated the basic literacy skills assessed.

Return Rates/Demographics

Teachers are asked to enter results for KIA online for all students entering kindergarten by the first week in October. Results are processed and summarized for each school and the system. For 2006-07, 11,301 students were expected to be assessed and 10,793 records were returned, for an overall return rate of 95.5%. Due to the nature of their disabilities, some students were not able to be assessed with the KIA. LEP students can be assessed in Spanish if necessary. About 14% of the entering kindergarten students received English as a Second Language (ESL) services and 4.7% were SWD students.

Nearly three fourths (73.7%) of the parents of students entering kindergarten reported their child attended pre-school for one year or more. This is probably a combination of day care and preschool experience. This is a 3.7 percentage-point increase from the 70% reported in 2004-05 and a 1 percentage point increase over last year’s number.

Literacy Results

No formal expectations are set for entering kindergarten students, but quarterly benchmarks help teachers monitor progress and status across the year.

In terms of the more basic pre-reading skill of print concepts, Table 7 indicates that:

- almost 74% of kindergarteners could identify six or more print concepts,
- more than 77% could identify 11- 54 letters (upper- and lower-case letters are counted separately).

In terms of more advanced skills:

- more than 36% were proficient in retelling a story,
- almost 45% could identify 11-54 letter sounds, and
- more than 13% could identify six or more words.

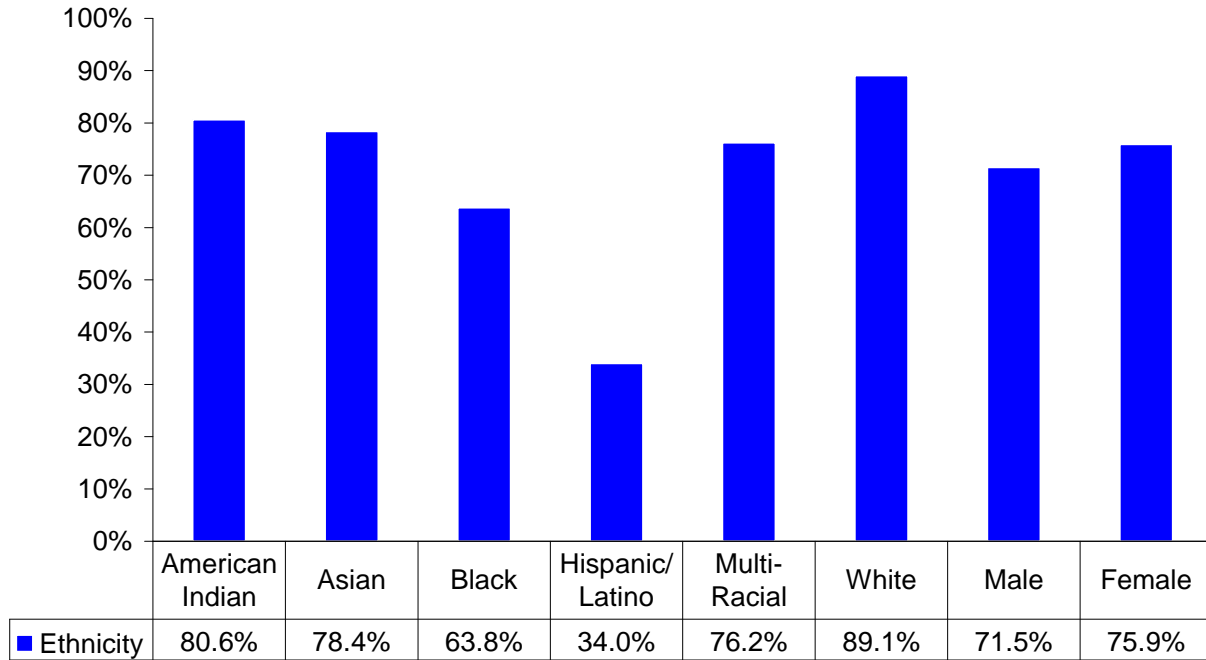
This suggests that few students enter kindergarten truly reading, but most have a good foundation in pre-reading skills.

**Table 7
Literacy Assessment Results, 2006-07, Kindergarten**

Print Concepts			Retelling			Letter ID			Letter Sound			Word ID		
Range of:	2005-06	2006-07		2005-06	2006-07	Range of:	2005-06	2006-07		2005-06	2006-07	Range of:	2005-06	2006-07
				%			%			%			%	
			0	3.9	7.1	0	7.0	9.2	0	35.0	34.7	0	56.2	60.6
1-5	22.7	19.19	1	8.4	9.6	1-10	11.6	11.9	1-10	3.3	14.4	1-5	26.0	25.9
6-10	27.9	28.69	2	47.7	46.8	11-20	8.0	7.7	11-20	9.9	9.1	6-10	4.6	3.8
11-19	45.2	45.02	3	30.7	30.6	21-54	69.2	71.2	21-54	32.1	35.6	11-21+	9.0	9.6
			4	5.1	5.9									
Null Answer	4.2	7.08	Null Answer	4.2	0.0	Null Answer	4.2	0.0	Null Answer	9.8	6.2	Null Answer	4.2	0.0

Some differences were evident in the percentage of students subdivided by ethnic group who could identify six or more print concepts. A relatively small percentage of Hispanic/Latino students were able to identify six or more print concepts, with the other groups ranging from almost 64% for Black/African American students to 87% for White students. Female students were somewhat more likely to identify six or more print concepts than male students.

Figure 6
Students Who Can Identify Six or More Print Concepts
by Ethnicity and Gender, Fall 2007, Kindergarten



n = 10,793 students assessed of 11,301 students enrolled.

Phonological Awareness Skills Test (PAST) Results

This test is given as a part of the KIA, the K-2 ALP II, and the Title I Intervention programs. It is administered because research shows phonemic awareness is the best single predictor of reading ability in kindergarteners. Each subtest includes six items, and a student masters a subtest with five correct answers. If a student makes three consecutive errors in a subtest, the subtest is discontinued and the next subtest is administered.

In the fall, the last three subtests are administered only to the subset of students who show mastery of the first five subtests. On the first five subtests, the highest percentage of students show mastery for syllable blending (62%) and rhyme recognition (50%). The Syllable Blending subtest is used to identify enrolling kindergarten students for additional literacy services in the Accelerated Learning Program (ALP II)/Title I. The lowest percentage of students show mastery of the concept of the spoken word subtest (27%).

Table 8 also presents information about performance of kindergarten students for two years. It should be noted that in 2006-2007, no null answers were recorded, meaning that all students reported were assessed on each sub-test. The larger percentages in 2006-07 for the lower scores may be presumed to be similar to the null scores for the year before. Further, it appears that substantial increases in strong performance were noted for syllable blending and syllable segmentation, suggesting that somewhat more children had strong pre-literacy skills in 2006-07 than was true for the previous year.

Table 8
Phonological Awareness Skills Test (PAST), Fall 2005-06 to Fall 2006-07, Kindergarten

Score	Concept of Spoken Word		Rhyme Recognition		Rhyme Production		Syllable Blending		Syllable Segmentation		Syllable Deletion		Phoneme Isolation (Initial Sounds)		Phoneme Isolation (Final Sounds)	
	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07	2005-06	2006-07
	%		%		%		%		%		%		%		%	
0	14.9	16.0	14.4	16.7	38.8	43.3	22.7	24.3	22.0	24.4	36.6	38.1	65.1	65.1	79.4	82.2
1	10.4	11.2	2.7	2.7	5.2	5.4	2.3	2.8	3.0	2.9	2.3	3.1	1.8	2.1	2.6	2.7
2	8.9	9.9	6.1	5.8	4.1	4.3	2.5	2.7	3.5	3.5	2.2	3.0	1.9	2.1	1.8	1.9
3	15.8	16.4	8.2	8.9	5.1	4.7	3.5	3.2	7.4	7.1	3.3	3.8	2.5	2.4	1.8	1.8
4	18.4	19.2	15.3	15.8	6.6	6.9	4.5	4.6	24.3	24.0	5.0	5.8	3.1	3.4	2.3	2.8
5	17.7	17.9	13.1	13.0	12.0	12.4	9.5	8.9	17.2	17.6	6.9	8.5	7.1	8.2	3.5	3.7
6	9.7	9.3	36.1	36.9	24.2	23.1	50.9	53.4	18.5	20.5	14.2	16.8	14.4	16.4	4.5	4.7
Null Answer	4.2	0.0	4.2	0.0	4.2	0.0	4.2	0.0	4.2	0.0	29.5	0.0	4.2	0.0	4.2	0.0

Note: Bold indicates mastery (or beyond) for the first five subtests of the PAST.

Oral Language

The levels of this assessment indicate the level of development of that particular oral language skill. Proficiency is considered level of 3 or 4. More than 70% of the students entering kindergarten in WCPSS met or exceeded this standard in all areas except “Asking Questions.” Almost two thirds (62%) of the students met the standard in that category.

Table 9
Oral Language, 2006-07, Kindergarten

Score	Communicates			
	Starts Conversation	Personal Experience	Asking Questions	Talks While Pretending
1	6.2%	8.5%	10.1%	5.9%
2	18.5%	20.2%	27.7%	19.0%
3	55.7%	54.8%	50.1%	59.9%
4	19.6%	16.5%	12.1%	15.2%

Note: Bold indicates mastery (or beyond)

K-5 ASSESSMENT RESULTS

Literacy Results

This section summarizes trends for K-5 assessment results in 2006-2007. The return rate for assessment results was 98.2%, up slightly from 2004-05.

Receptive Literacy Trends

Receptive literacy is measured in a variety of ways. One common measure for students in grades K-2 is instructional book levels. Books that reflect specific reading levels are available for the 32 book levels through which students advance, as they become increasingly proficient readers. Book-level standards, reflecting fluency and understanding of the text, have been set in WCPSS for each grade level as guidelines for assessing grade-level fluency. Overall trends are that:

- The vast majority of students in grades K-2 achieved book-level standards, with the highest percentage of students attaining the standard among kindergarten students. Depending upon grade-level, between 80% and 89% of the students in grades K, 1, & 2 demonstrated desired reading skills by Spring of 2007, see Table 10.
- Similar to 2004-05 and 2005-06, subgroup results revealed differences in the reading book-levels of elementary students. Hispanic/Latino students, FRL students, SWD students, and limited English proficient (LEP) students continue to show lower proficiency percentages, see Figure 7.

As shown in Table 10, longitudinal results suggest a relatively continuous pattern of annual improvement in the percentage of kindergarten students achieving book-level standards since 2002-03, whereas performance remains relatively stable for 1st- and 2nd-grade students. Eighty-nine percent of kindergarten students met book-level standards in 2006-07, which is even with the prior year, but a ten-percentage point improvement from 2004-05.

Table 10
Reading Book-Level Standards, 2002-03 to 2006-07, Grades K-2

	# Students Assessed	% Achieved Standard
Grade K (Book-Level Standard 3-4)		
2002-03	8,706	76.9%
2003-04	8,067	80.3%
2004-05	9,346	79.0%
2005-06	8,234	89.0%
2006-07	8,987	89.2%
<i>Percentage point change 2002-03 to 2006-07</i>		+12.3
Grade 1 (Book-Level Standard 15-16)		
2002-03	8,445	79.7%
2003-04	7,981	80.9%
2004-05	9,310	81.4%
2005-06	8,535	81.0%
2006-07	8,696	80.4%
<i>Percentage point change 2002-03 to 2006-07</i>		+0.7
Grade 2 (Book-Level Standard 23-24)		
2002-03	8,189	84.2%
2003-04	7,411	83.8%
2004-05	8,668	84.7%
2005-06	9,024	83.8%
2006-07	8,349	83.5%
<i>Percentage point change 2002-03 to 2006-07</i>		-0.7

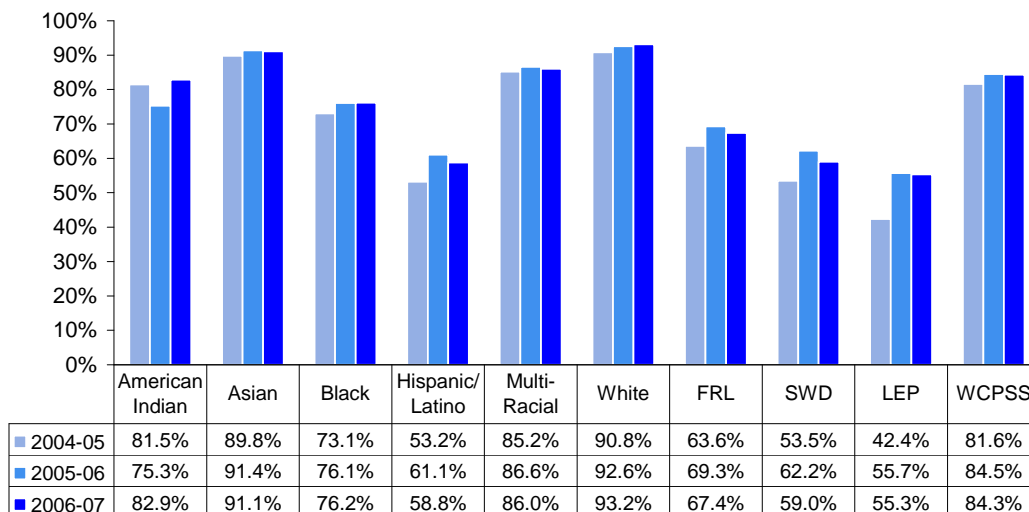
Data Source: Annual K-5 Assessment Data and Annual WCPSS Student Locator Data.

Interpretation Example: In 2006-07, 89.2% of the 8,987 assessed kindergarten students achieved the reading book-level standard, yielding a 12.3 percentage point increase since 2002-03.

According to subgroup results presented in Figure 7, groups of students have diverse levels of reading achievement at grades K-2. Student subgroups with the lowest reading proficiency rates had the greatest gains between 2004-05 and 2006-07, closing achievement gaps slightly. However, trends were more positive between 2004-05 and 2005-06 than between 2005-06 and 2006-07. Between 2005-06 and 2006-07, about the same percentages of students who are LEP attained book-level standard, while there were slight decreases for FRL and SWD students. Gaps are still considerable, suggesting a need for additional instructional assistance to improve reading proficiency.

- LEP students had the lowest reading proficiency rates followed by Hispanic/Latino students, SWD students, and FRL students.
- LEP students experienced the largest gain in reading proficiency between 2004-05 and 2006-07 (a 12.9 percentage point increase).
- SWD students, Hispanic/Latino students and FRL students also had relatively large gains in reading proficiency between 2004-05 and 2006-07 (5.5 percentage points, 5.6 percentage points and 3.8 percentage points respectively).
- In comparison to 2004-05 results, Asian students, Black/African American students, Multiracial students, and White students experienced very small increases in the percentage meeting reading book-level standards.
- In 2006-07, the largest achievement gap was between White students and LEP students, at 37.9 percentage points.

Figure 7
Students Meeting Book-Level Standards by Subgroups, 2006-07, Grades K-2



Note: Counts are total number of students meeting book-level standards in that subgroup. Ethnic data are unduplicated counts; academic risk-group data are duplicated counts.

Data Source: Annual K-5 Assessment Data and Annual WCPSS Student Locator Data.

Interpretation Example: In 2006-07, 58.8% of all assessed Hispanic students in grades K-2 achieved reading book-level standards.

As shown in Table 11, the percentage of 2nd and 5th grade students proficient in reading strands was greater than the percentages of 3rd and 4th grade students on each of the reading strand measures.

- Most students in grades 2-5 (72%) scored proficient on all reading strands with only modest variations in performance across strands. Fifth grade students have higher percentages of proficiency on reading strands compared to 3rd- and 4th-grade students. This pattern is similar to reading EOG results for 2006-07.
- Slightly lower percentages of students in grades 3-5 performed at or above grade level on expository (62.5%) and narrative (62.9%) assessments (see Figures 8 and 9). Nevertheless, proficiency rates on expository and narrative rubric assessments increased between 2004-05 and 2006-07.

As illustrated in the following table, close to three fourths of students in grades 2-5 scored proficient on reading strands, although mastery percentages are lower than those seen on EOG reading exams. Modest variations in performance across strands are apparent, with reading habits a little higher than the other areas.

Table 11
Reading Strands Proficiency, 2006-07, Grades 2-5

Grade	Reading Strands			All Reading Strands		
	Reading Habits	Vocabulary Strategies	Text Comprehension	Proficient in All Strands	Data Reported	Missing Data
2	85.4%	83.3%	81.2%	77.2%	10,072	34
3	79.9%	75.4%	75.1%	68.8%	10,068	17
4	78.4%	75.0%	77.2%	69.3%	9,806	1
5	80.9%	78.3%	79.9%	72.8%	9,375	2
2-5 Combined	81.2%	78.0%	78.4%	72.0%	39,321	54

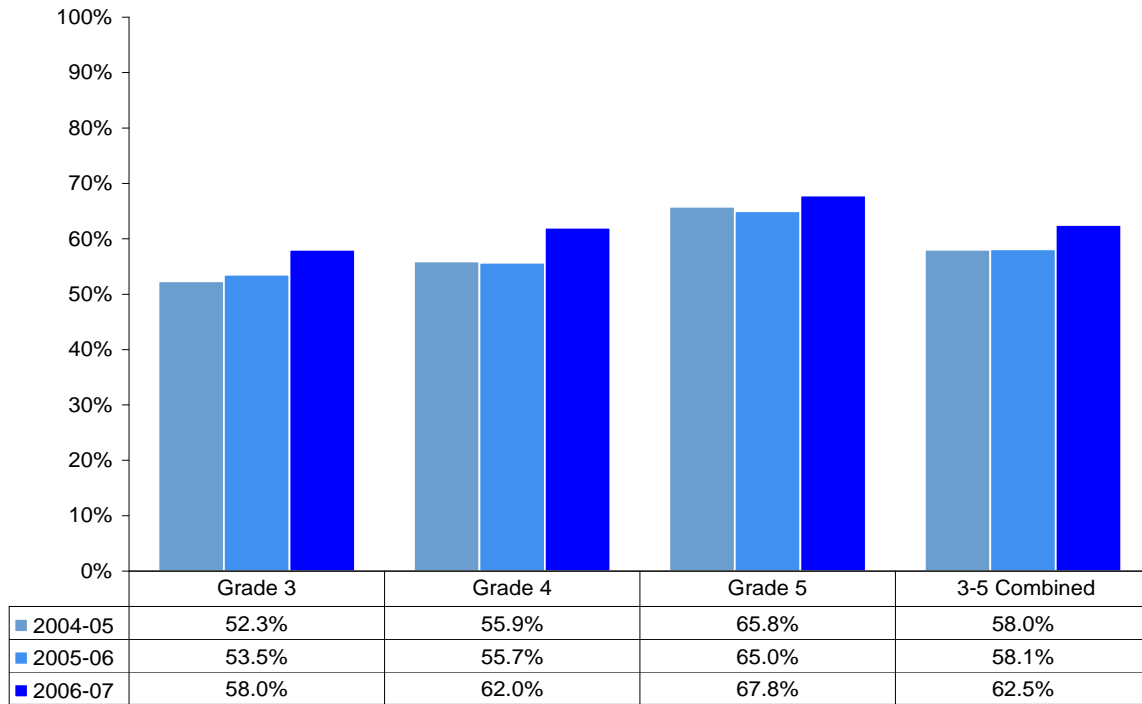
Note: A student is considered proficient in all strands if he or she is proficient in each strand. If a student is missing scores on one or more strands, his or her proficiency in all strands is considered missing.

Data Source: 2006-07 K-5 Assessment Data and WCPSS Student Locator Data as of June 2007

Interpretation Example: In 2006-07, 72.0% of the 39,321 students in grades 2-5 for which data were reported were proficient in all reading strands.

The following figures show that just less than two thirds of students in grades 3-5 scored proficient on the expository and narrative rubric assessments. Performance improved slightly between 2005-06 and 2006-07. These assessments require that students read passages and respond with short answers. Because students must demonstrate both reading and writing skills on these assessments, students are often less likely to score proficient than on other measures of literacy. Fifth graders show the strongest performance.

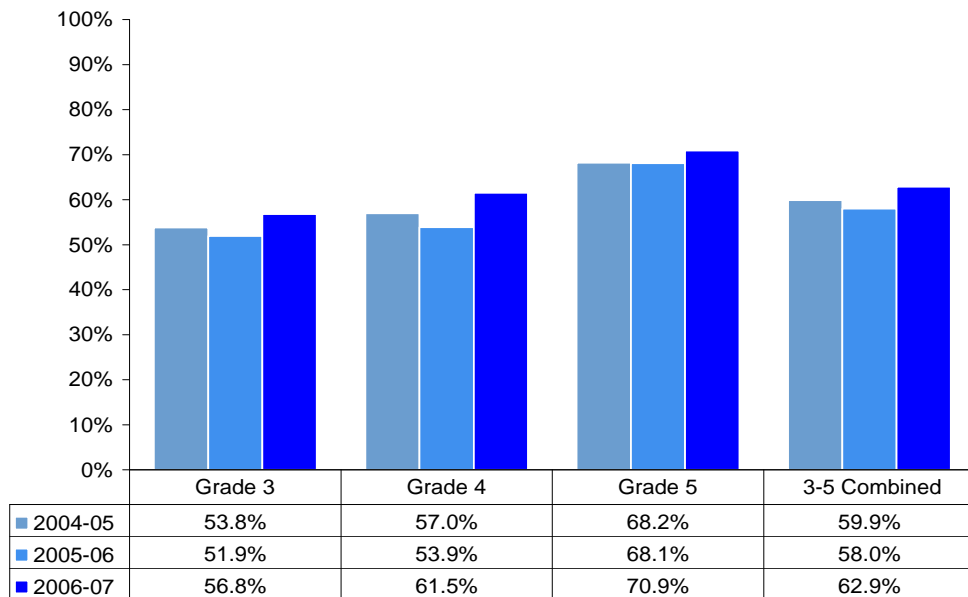
Figure 8
Expository Rubric Proficiency, 2004-05 to 2006-07, Grades 3-5



n=27,156

Data Source: Annual K-5 Assessment Data and Annual WCPSS Student Locator Data.

Figure 9
Narrative Rubric Proficiency, 2004-05 to 2006-07 Grades 3-5



n=27,289

Data Source: Annual K-5 Assessment Data and Annual WCPSS Student Locator Data.

Expressive Literacy Trends

Across grades 3-5 on several measures of writing performance, more than half of WCPSS demonstrated proficient writing skills. Writing content proficiency was higher based on students' most recent writing collection than writing conventions proficiency based on students' final writing portfolio.

Table 12 shows the majority of all students in grades 2-5 demonstrated proficiency on all writing strands, with the best performance among 5th-grade students.

Table 12
Writing Strands Proficiency, 2006-07, Grades 2-5

Grade	Writing Strands					All Writing Strands		
	Prewriting	Drafting	Revising	Editing	Publishing	Proficient in All Strands	Data Reported	Missing Data
2	77.7%	75.4%	65.6%	64.0%	79.0%	58.6%	10,074	32
3	72.5%	70.0%	60.1%	61.4%	75.7%	53.6%	10,068	17
4	68.7%	67.4%	59.6%	60.0%	72.6%	53.3%	9,802	5
5	75.9%	76.5%	70.3%	69.1%	80.4%	63.2%	9,374	3
2-5 Combined	73.7%	72.3%	63.8%	63.6%	76.9%	57.1%	39,318	57

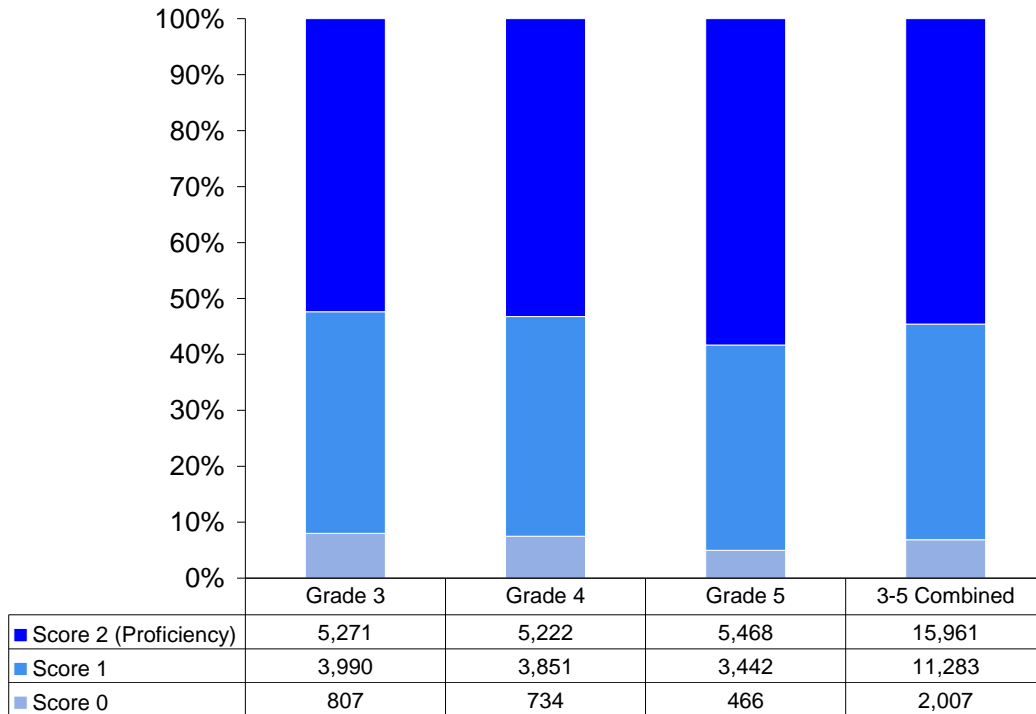
Note: A student is considered proficient in all strands if he or she is proficient in each of the five strands. If a student is missing scores on one or more strands, his or her proficiency in all strands is considered missing.

Data Source: 2006-07 K-5 Assessment Data and WCPSS Student Locator Data as of June 2007

Interpretation Example: In 2006-07, 57.1% of the 39,318 students in grades 2-5 for which data were reported were proficient in all writing strands. Revising and editing strands had the lowest proficiency percentages among the five writing strands.

Results displayed in Figure 10 show that 54.6% of students in grades 3-5 were considered proficient on writing conventions, that is, they received a score of 2 on their edited, final draft within their writing portfolio. Fifth graders had slightly lower proficiency rates than students in the other grades.

Figure 10
Writing Conventions, 2006-07, Grades 3-5



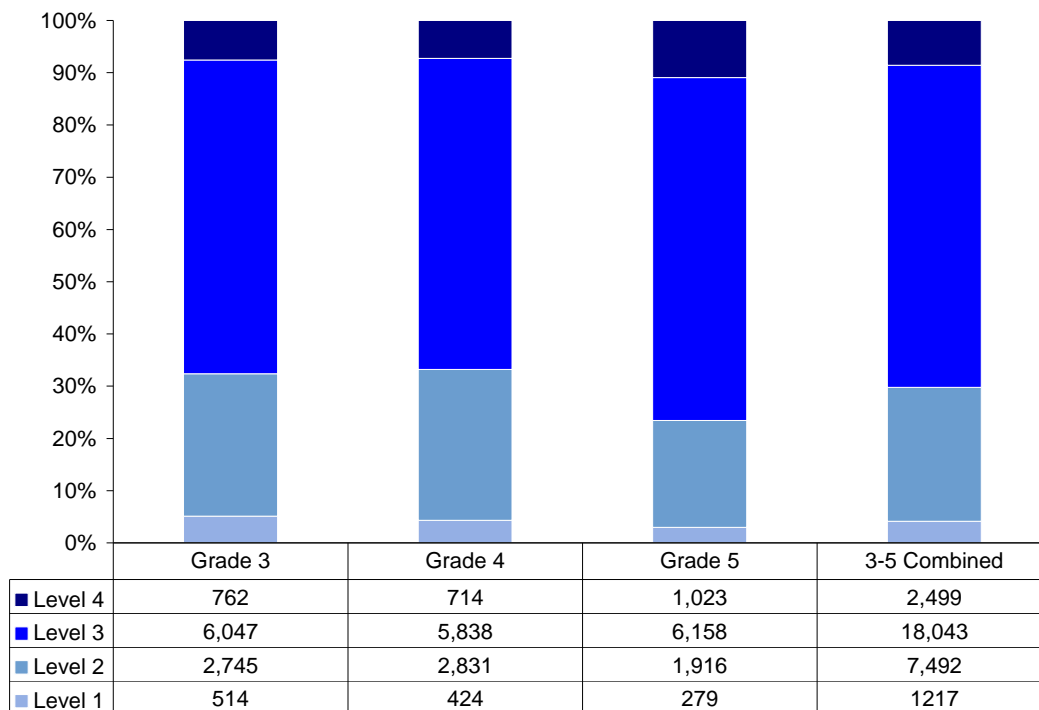
n = 29,251

Data Source: 2006-07 K-5 Assessment Data and WCPSS Student Locator Data as of June 2007.

Interpretation Example: In 2006-07, slightly over half of students in grades 3-5 scored proficient on writing conventions.

Figure 11 shows that a higher percentage of students (70.2%) have writing content mastery, based on assessments of their most recent writing collection. This is up by 3 percentage points over 2005-06, when 67% scored proficient.

Figure 11
Writing Content Rubric for Most Recent Writing Collection, 2006-07, Grades 3-5



n = 29,251

Data Source: Annual K-5 Assessment Data and Annual WCPSS Student Locator Data.

Interpretation Example: In 2006-07, the majority of students in grades 3-5 were proficient (at levels 3 or 4) in writing content.

END OF GRADE (EOG) MULTIPLE CHOICE TEST READING RESULTS

EOG tests are given to students in reading and mathematics at the end of each school year. These tests consist of multiple-choice items that are derived directly from the Standard Course of Study, which is the state’s official curriculum. Individual students’ scores are reported as scale scores as well as achievement levels.

The achievement level score categorizes student performance on EOG tests according to four broad levels, defined by the North Carolina Department of Public Instruction (DPI). General descriptions are shown below, with more specifics available at the DPI Web site, Accountability section (<http://www.ncpublicschools.org/accountability/>). Levels III and IV are considered proficient (at/above grade level). A small number of students who, for various reasons, are unable to demonstrate their learning on the multiple-choice EOG tests take alternate assessments. The results in this report do not include the results of those alternate assessments, as those results are reported in a separate document.

**Table 13
Achievement Levels for the North Carolina Testing Program**

<p>Level I: Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.</p>	<p>Level III: Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.</p>
<p>Level II: Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area, and are minimally prepared to be successful at the next grade level.</p>	<p>Level IV: Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work.</p>

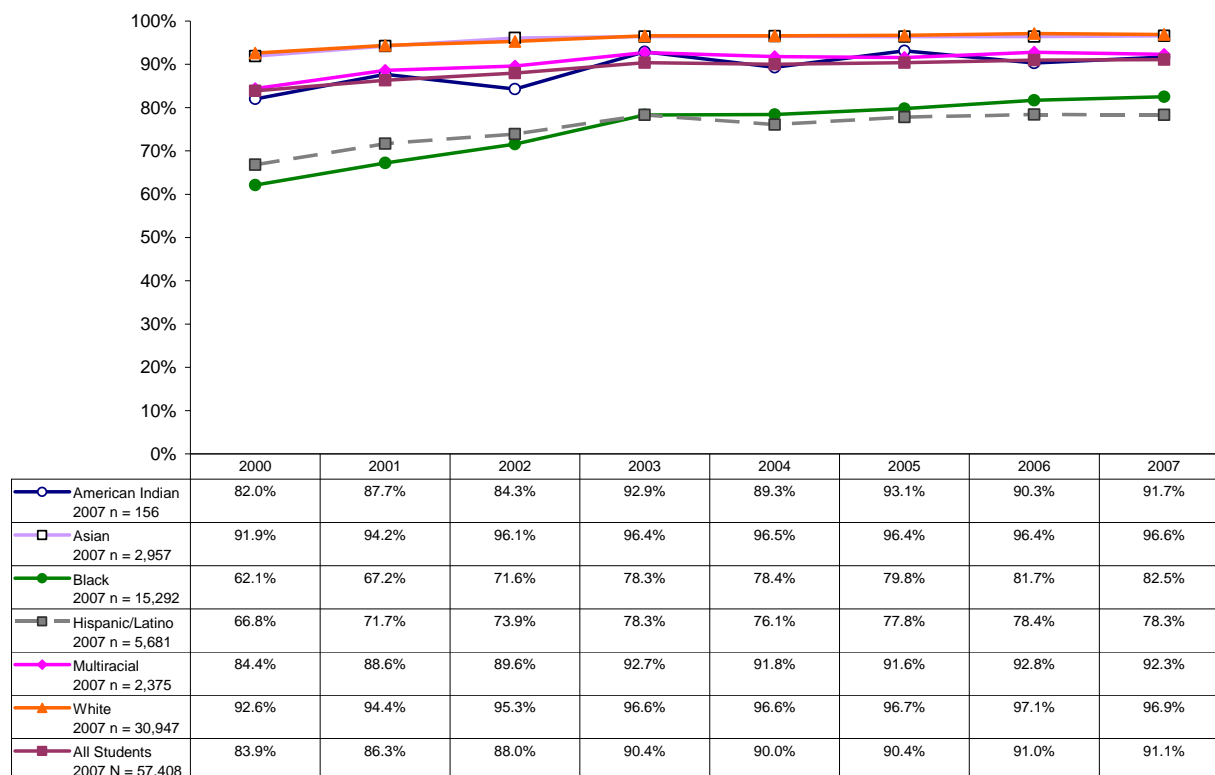
Note: Official descriptions actually vary by course and are listed in NC State Board of Education Policy HSP-C-018 <http://sbepolicy.dpi.state.nc.us/policies/HSP-C-018.asp?pri=01&cat=C&pol=018&acr=HSP>).

Grades 3-8

The percentage of students scoring proficient on EOG Reading tests in grades 3-8 has increased in recent years, from about 84% in 1999-00 to 91% in 2006-07 (Figure 12). The percentage of students in all ethnic groups scoring at grade level has also improved over time, with Black/African American students showing the most improvement (more than 20 percentage points).

In Spring 2007, the achievement gap between Black/African American and White students was 14.4 percentage points, with a 18.6 percentage point gap between Hispanic/Latino and White students. These gaps are considerably smaller than was the case in 1999-00, when those gaps were 30.5 percentage points and 25.8 percentage points, respectively.

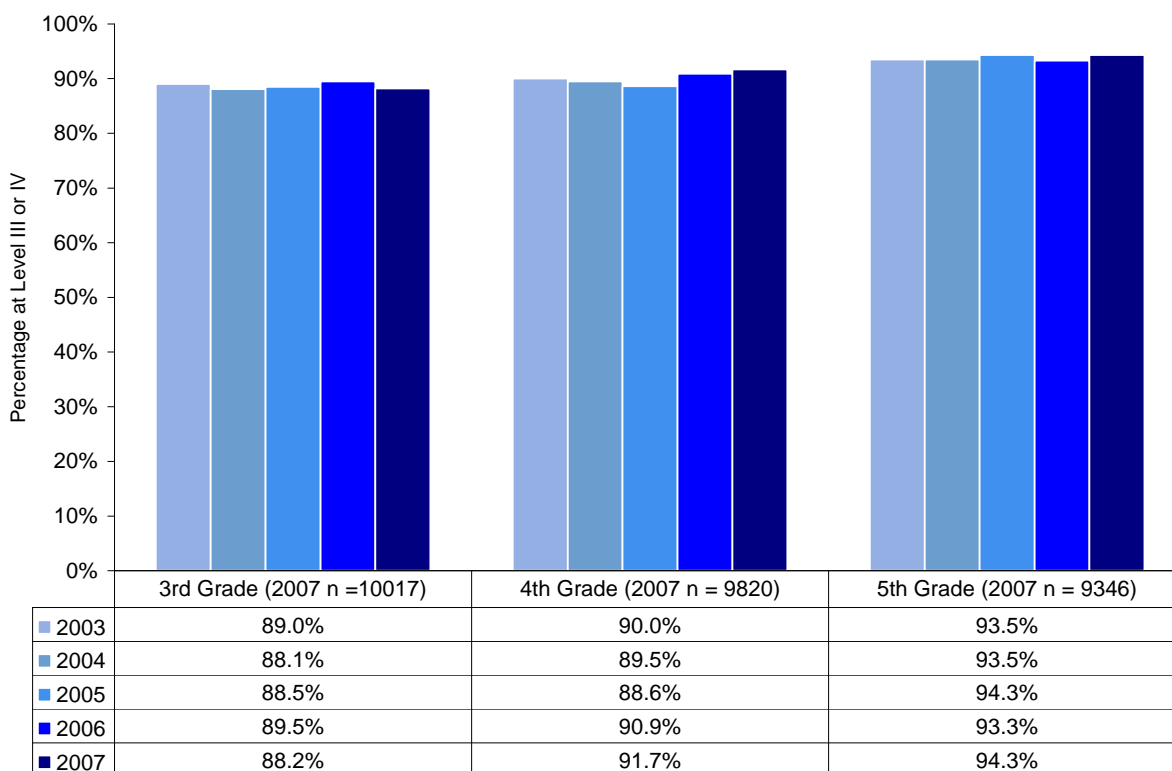
Figure 12
Students Proficient on Reading EOG by Ethnicity,
Spring 2000 to Spring 2007, Grades 3-8



Grades 3-5

At the elementary level, over 91% of WCPSS students who took the multiple-choice versions of the reading EOG test met or exceeded grade-level standards in reading in Spring 2007 (shown in Figure 13). The pattern of performance has varied slightly across grade levels every year since Spring of 2003, with grade 3 showing the lowest percentage of students at grade level (just over 88% in Spring 2007) and grade 5 the highest (just over 94% in Spring 2007). Since spring of 2003, the percentage of students scoring at grade level has generally increased within each grade level, except for grade 3, where the percent of students scoring at/above grade level has been essentially unchanged.

Figure 13
Students Proficient on Reading EOG by Grade Level,
Spring 2003 to Spring 2007, Grades 3-5



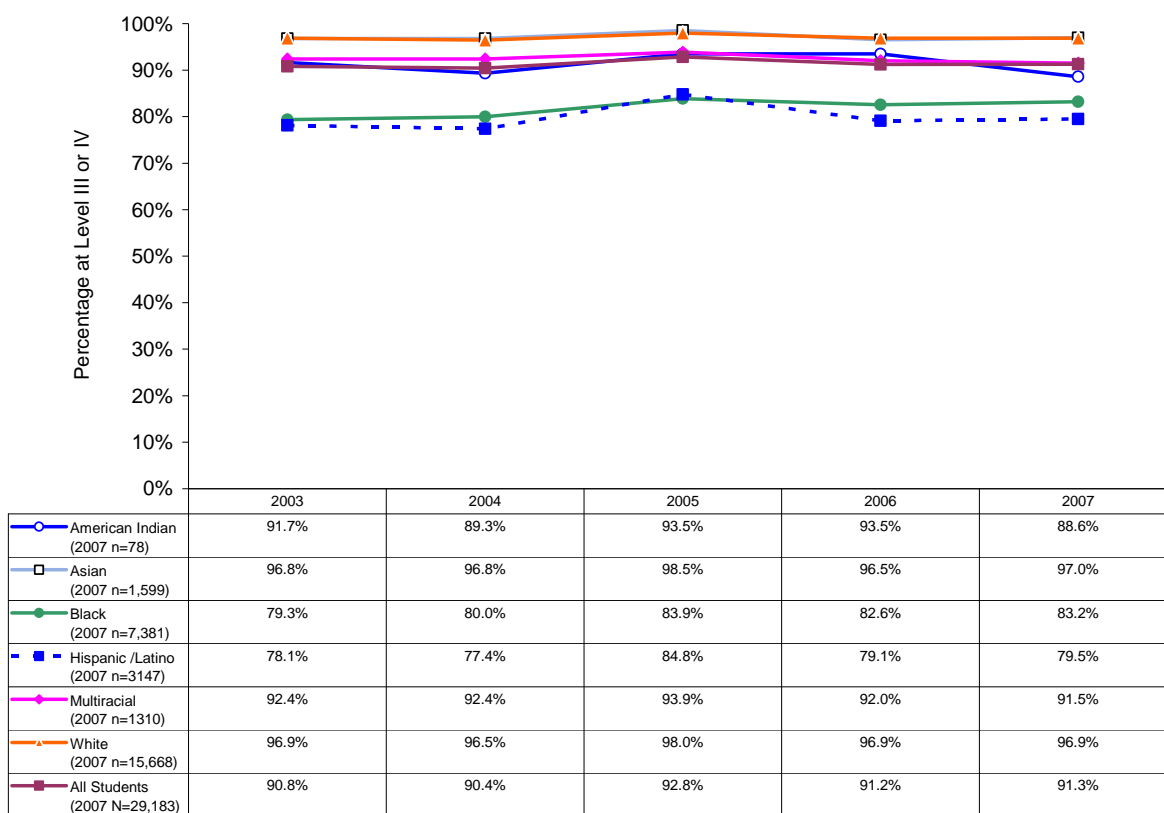
As previously discussed, ethnic achievement gaps closed somewhat across grades 3-8 between 1999-2000 and 2006-07 (see Figure 14). However, for grades 3-5, results by ethnicity have only been monitored separately since 2002-03. Since that time, a review of elementary reading performance by ethnicity and gender reveals the following trends (see Figures 14-15):

- For most ethnic groups, reading achievement has been relatively stable since Spring 2003. However, a sizable change in percent of students reading on/above grade level has been observed for Black/African American students.

- In 2006-07, the percent proficient by ethnic group varied from 79.5% to 97.0% , with White and Asian students showing the highest percentage of students scoring at grade level, and Hispanic/Latino and Black/African American students showing the lowest percentages.

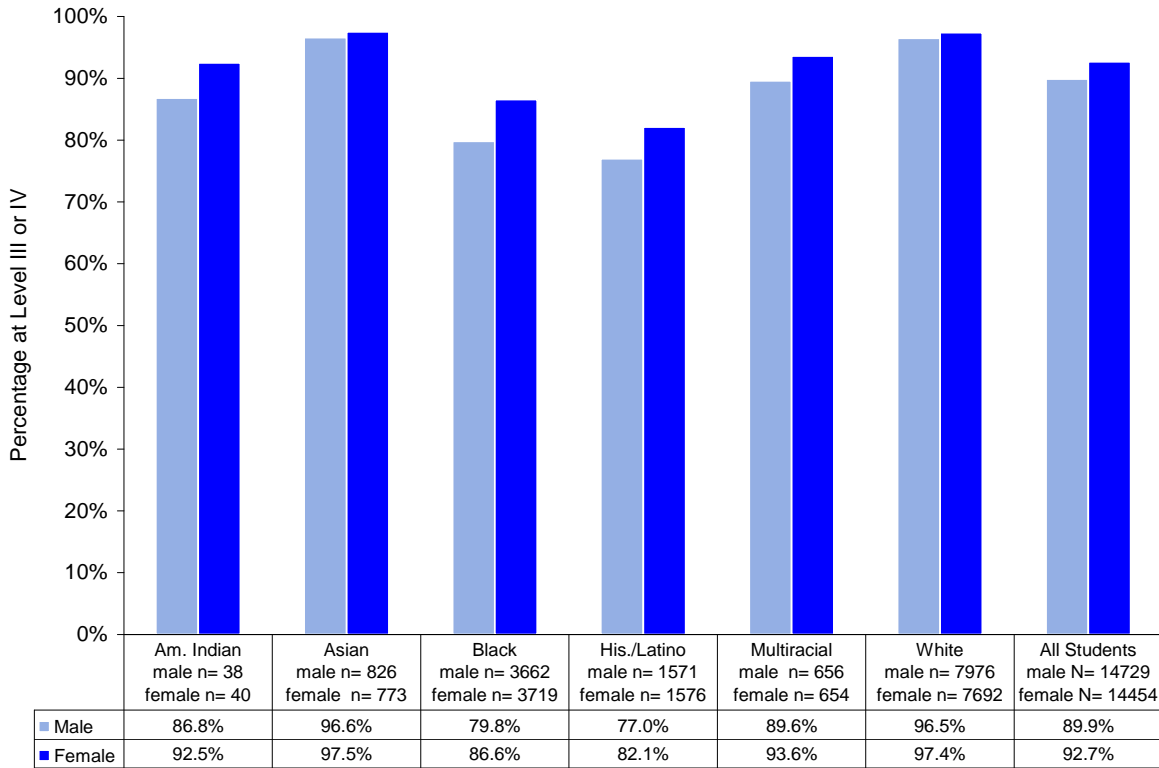
Two factors may have contributed to this relatively stable status: 1) Some groups already showed high proficiency in 2002-03, and 2) The WCPSS population has been increasing rapidly, especially for FRL and LEP students, who have traditionally shown lower proficiency on achievement tests and the need for the most support to reach grade level. The reading test will change in 2007-08, and the state is indicating proficiency standards will be made more rigorous, following changes in the reading curriculum that emphasize thinking skills, as well as reading decoding and comprehension.

Figure 14
Students Proficient on Reading EOG by Ethnicity,
Spring 2003 to Spring 2007, Grades 3-5



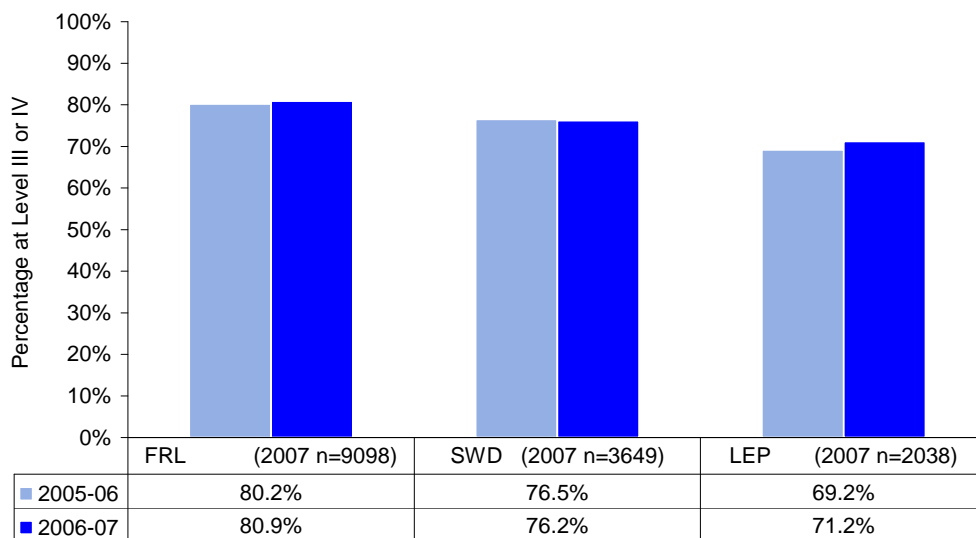
In Spring 2007, slightly larger percentages (about three percentage points overall) of female students than male students achieved proficiency in reading within all ethnic groups. Gender gaps were largest for American Indian, Black/African American, and Hispanic/Latino students (Figure 15).

Figure 15
Students Proficient on Reading EOG by Ethnicity and Gender,
Spring 2007, Grades 3-5



Among students who qualified for FRL, SWD students, and students with limited English proficiency (LEP), LEP students are least likely to score at grade level (see Figure 16). All three groups are less likely to score proficient than students without an academic risk factor, as is shown in Figure 17. It will be helpful to remember that 91.3% of all students in these grades were reading at/above grade level, so the gap between all students and students with these risk factors is on the order of ten to 20 percentage points.

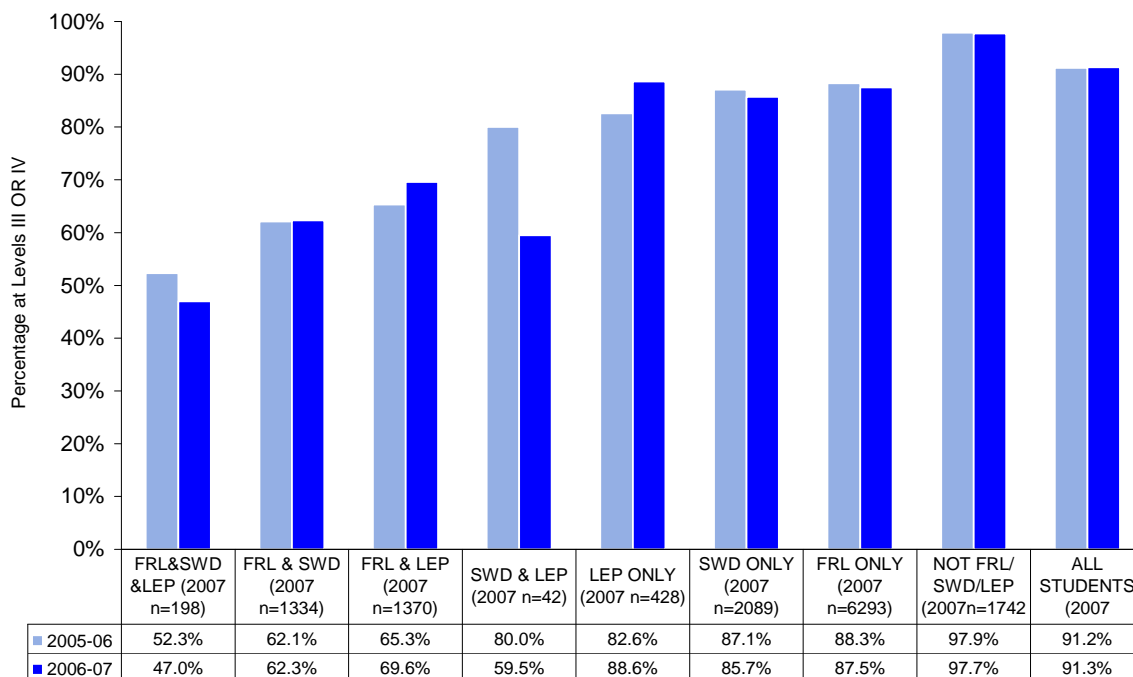
Figure 16
Students Proficient on Reading EOG by Academic Risk Factors,
2005-06 to 2006-07 Grades 3-5



Note: Duplicated count.

It has also been demonstrated that the percent of students proficient in reading decreases as the risk factors are combined. Figure 17 shows that while almost 98% of students in grades 3-5 who had none of the academic risk factors were reading at/above grade level, only 47% of students who had all three risk factors were reading on/above grade level. It should be remembered that some of these categories of students have relatively small numbers (for example, only 42 students were both LEP and SWD); creating some instability in year-to-year comparisons. However, it should also be noted that many of the multi-risk categories had smaller percentages of students at/above grade level for reading in 2006-07 than in the prior year.

Figure 17
Students Proficient on Reading EOG by Academic Risk Subgroup Combinations
2005-06 to 2006-07, Grades 3-5



Note: Count is unduplicated.

GRADE 4 WRITING ASSESSMENT RESULTS

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 conventions (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 EOG and 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 14). 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 14
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 18 shows the prompt utilized by NCDPI for the 2006-07 writing assessments at grade 4.

Figure 18
Grade 4 Writing Prompt for the 2006-07 School Year

Students in the fourth grade who participated in the General Writing Assessment were asked to write an imaginative narrative response to the following prompt:

Imagine a friend gave you a funny-looking watch. When you put the watch on, something very surprising happened. Write a story about what happened the time a friend gave you a funny-looking watch.

Note: Adapted from <https://www.rep.dpi.state.nc.us/prelimwrite0506.pdf> .

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.

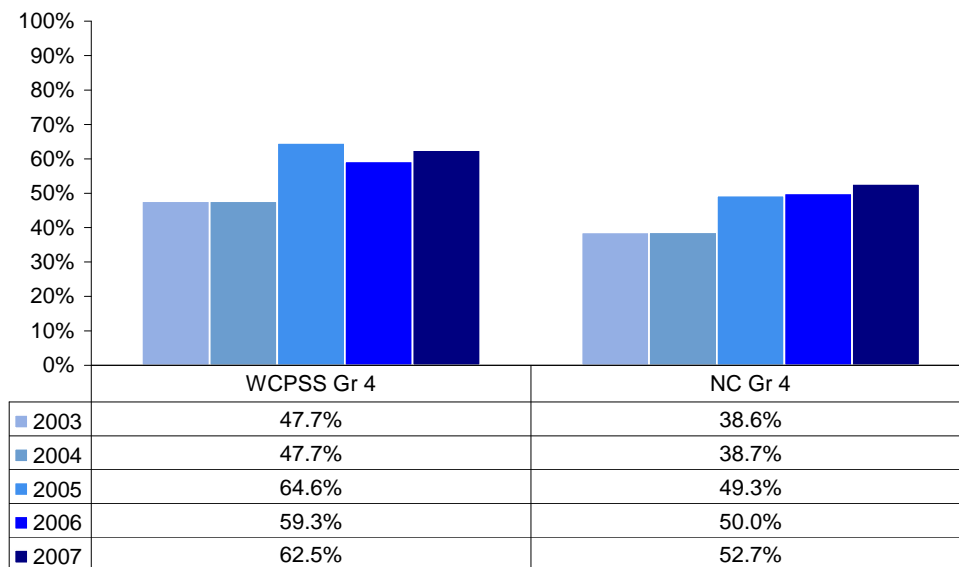
Writing Assessment Results

Writing assessment results should be interpreted carefully, as each year the specific prompts change. While comparisons of the percentages of students at each achievement level may be made to previous years, it must be remembered that the scores associated with each achievement level were generated through different processes and using different prompts across years.

Results illustrate the following patterns:

- For the past five years, WCPSS proficiency rates on the state’s grade 4 Writing Assessment results have consistently been higher than those for the state as a whole.
- A large improvement in proficiency rates was evident in 2004-05 both statewide and in WCPSS, which corresponded to a change in the scoring methodology for the test. This increase was sustained at the state level in 2005-06, with a small decrease in WCPSS. In 2006-07, both WCPSS and North Carolina posted small improvements. Over the period shown, the trend has been one of improvement for both WCPSS students and students in the state. Writing proficiency rates, however, remain among the lowest across all of the tests that are part of the state’s testing and accountability program.

Figure 19
Percentage of Students Proficient on Writing Assessment, Spring 2003 to Spring 2007, Grade 4

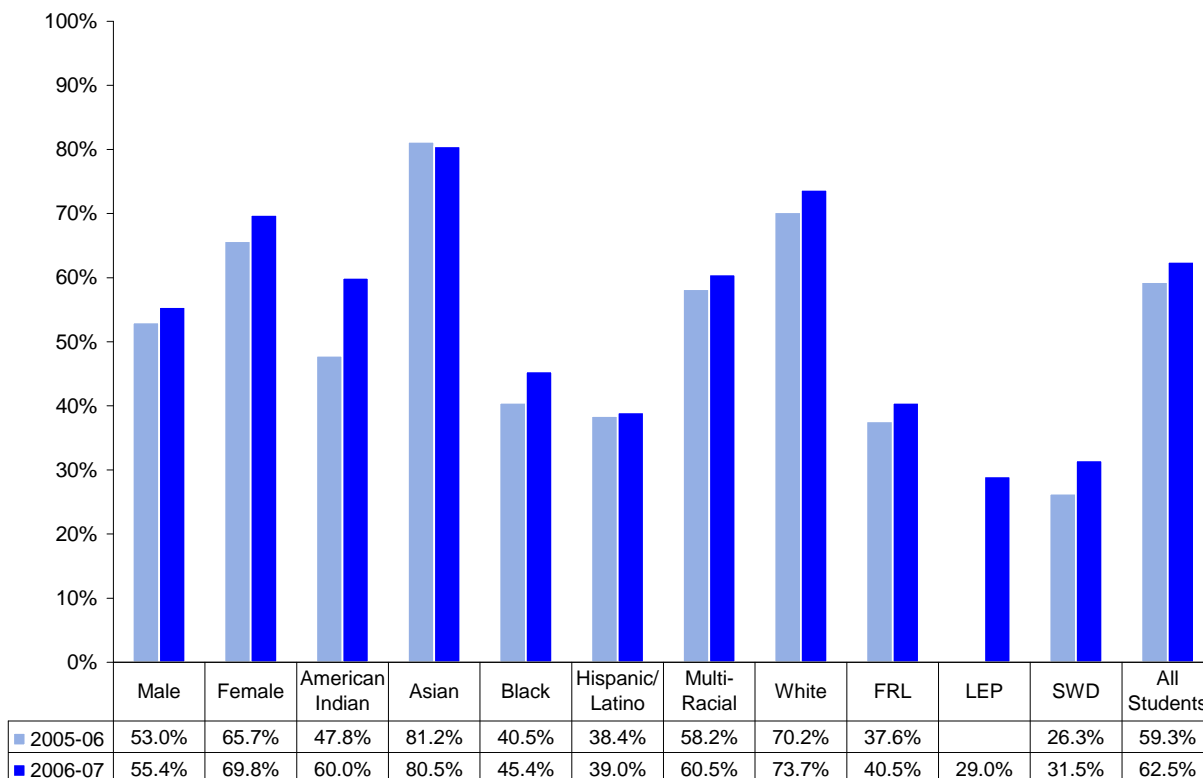


Notes: *n* = 8,882 for WCPSS Spring 2007, *n* is not yet published for NC Spring 2007.

When results are disaggregated by subgroups:

- Among various student subgroups in WCPSS, Asian, White, and female students were the only groups to reach a proficiency rate above 65% in 2006-07.
- The lowest proficiency rates in 2006-07 (for groups that had at least 25 tested students) were found among the FRL, SWD, Black/African American, and Hispanic/Latino subgroups, all of whom had rates lower than 50%.
- All sub-groups except Asian students saw increases in the percent of students scoring at/above grade level when the 2006-2007 results are compared with those from the prior year.
- Male students were less likely to score at or above Level III than were female students (55% versus 70%, respectively).

Figure 20
Writing Test Results Disaggregated, 2005-06 and 2006-07, Grade 4



Source: July 2006 DPI report. (LEP data for 2005-06 was not available)

TESTING OUTCOMES—MATHEMATICS

KINDERGARTEN INITIAL ASSESSMENT RESULTS (KIA): 2006-07

Kindergarten students are assessed during their first few weeks of school to diagnose strengths and needs and to help teachers plan instruction. Students are assessed with the Kindergarten Initial Assessment (KIA) in the areas of literacy, mathematics, physical, and personal/social skills. Most assessments are carried out as instructional tasks in centers or based on teacher observations over time. The greatest amount of assessment time is spent on literacy. Those results are reported in the literacy section of this report. This section includes mathematics, physical, and personal/ social results. All data reported here come from summary files created by E&R's Testing Office in the fall of 2006 based on teachers' submissions through an electronic survey process.

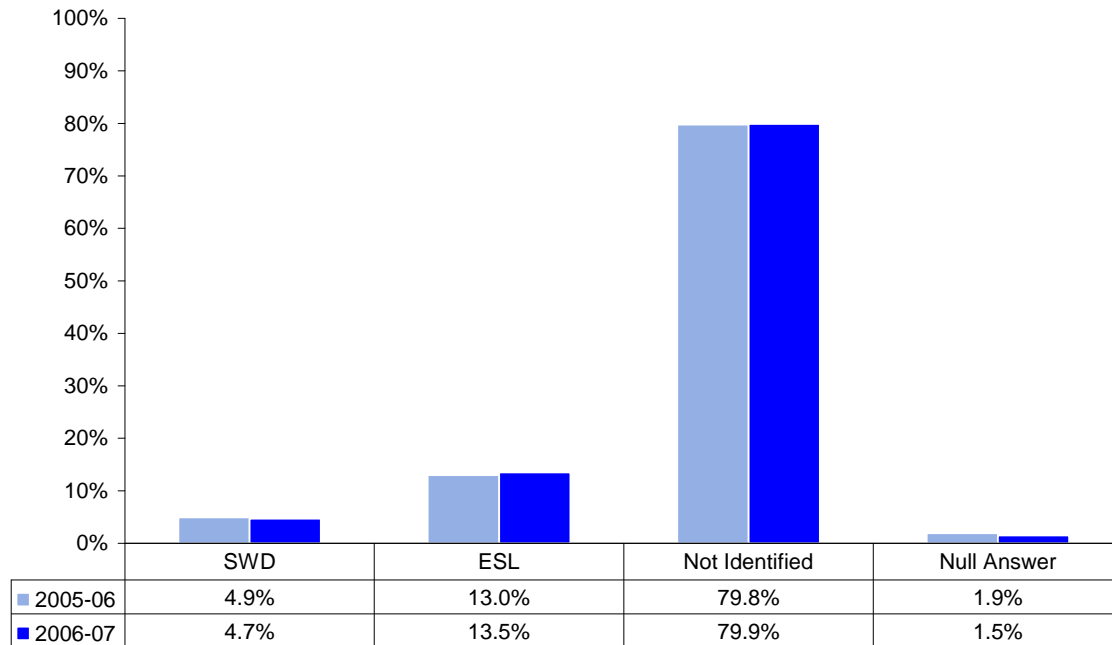
Results for 2006-07 show that over three fourths of the students entering kindergarten in WCPSS demonstrate all mathematics skills assessed except recognizing rectangles and the ability to continue a pattern. Hispanic/Latino students showed lower mastery than other ethnic subgroups. More than four fifths of kindergarten students assessed were able to demonstrate each physical skill assessed, with more variable demonstration of each personal/social skill assessed (79.1% to 99.1%).

Return Rates/Demographics

Teachers are asked to complete the online KIA for all students entering kindergarten by the first week in October. Results are processed and summarized for each school and the system. For 2006-07, 11,301 students were expected to be assessed and 10,793 records were returned, for an overall return rate of 95.5%. Due to the nature of their disabilities, some students were not able to be assessed with the KIA. LEP students can be assessed in Spanish if necessary.

Figure 21 shows that 13.5% of the entering kindergarten students were identified as receiving English as a Second Language (ESL) services and 4.7% were SWD students.

Figure 21
ESL/SWD Identification, 2005-07, Kindergarten



N = 10,793

Note: Students are included only in one bar

Nearly three fourths (74%) of the parents of students entering kindergarten reported their child attended preschool for one year or more. This is likely a mix of day care and preschool experience. This is a 3.7 percentage-point increase from the 70% reported in 2004-05 and one percentage point more than was reported in 2005-06.

High percentages of students entering kindergarten in the 2006-07 showed reasonable early mathematics skills.

- More than 82% of students could count higher than 10 on the rote counting assessment,
- More than 80% recognized a circle, square, and triangle,
- Almost 55% recognized the next step in a pattern and almost 78% were able to copy a pattern.

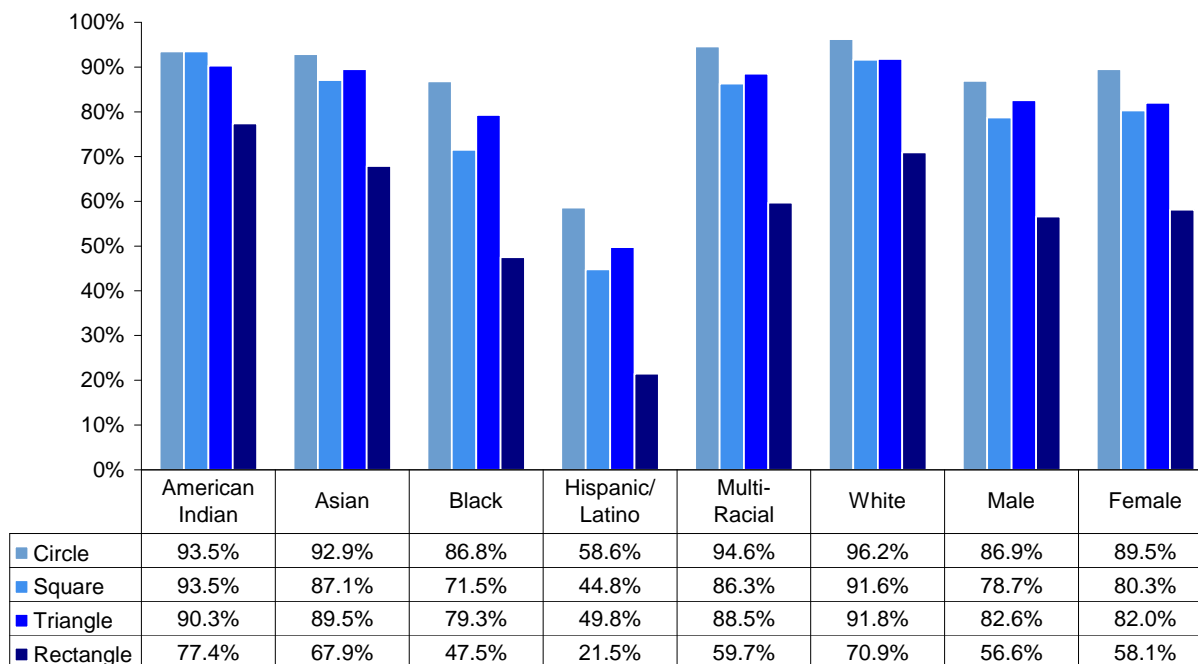
A smaller percentage of students recognized a rectangle (57%) but there was a large change in the percent of students able to create a new pattern, when performance in 2006-07 is compared with the prior year.

Table 15
Mathematics, 2005-07, Kindergarten

Rote Counting			One-to-One			Geometry			Patterns						
	% 05-06	% 06-07		% 05-06	% 06-07		% 05-06	% 06-07	NEXT		COPIES		NEW		
									% 05-06	% 06-07	% 05-06	% 06-07	% 05-06	% 06-07	
0	2.0	3.4	6 objects	11.4	68.0	Circle	87.4	88.2							
Range 1-10	12.5	14.4	10 objects	76.9	79.1	Square	80.2	79.5	Yes	74.0	54.8	73.8	77.8	52.2	77.4
Range 11-20	30.8	30.8	Not Yet	7.8	10.2	Triangle	82.1	57.3	No	22.1	45.2	22.3	22.1	43.9	22.6
Range 21-50+	50.8	51.3				Rectangle	57.1	82.3							
						Not Yet	4.9	8.4							
Null Answer	3.9	0.0	Null Answer	3.9	0.0	Null Answer	3.9	0.0	Null Answer	3.9	0.0	3.9	0.0	3.9	0.0

Recognizing a circle was demonstrated by the highest percentage of students of each ethnic group, with the lowest percent of students able to recognize a rectangle. Hispanic/Latino students were less likely to demonstrate knowledge of the shapes than students in the other groups.

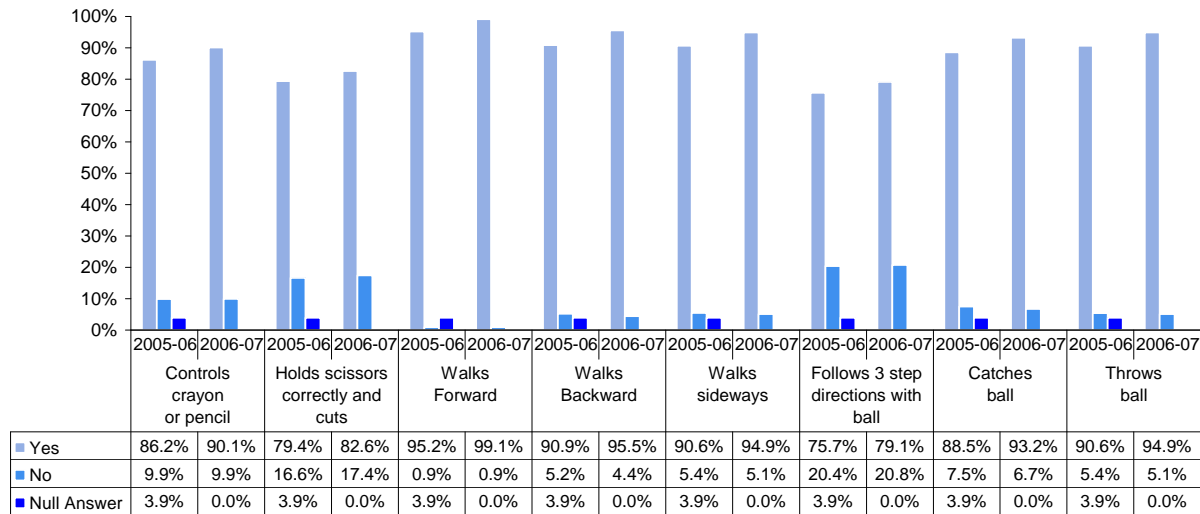
Figure 22
Students Recognizing Mathematics Shapes by Race and by Gender, 2006-07, Kindergarten



Physical Skills

Figure 23 indicates that well over 90% of incoming kindergarteners could complete most of the tasks in the expected physical skills areas. While only about 83% of students were able to demonstrate holding scissors and cutting correctly, following three-step directions was the most difficult skill assessed, with proficiency demonstrated by just less than 80% of students. Compared with results for the prior year, as is shown in Figure 23, larger percentages of students were proficient on all of these tasks in 2006-07.

**Figure 23
KIA Physical Skills Results, 2005-06 and 2006-07**



Personal Social Inventory

Students are observed over a two-week period for the Personal Social Inventory, see Table 16. These observations are done in a variety of settings. Students are expected to perform at a level 3 or 4 for each of these tasks. Over 67% did so for each skill. Students were most likely to recognize and respond to their name, and least likely to be able to solve problems and to follow school routines.

Table 16
KIA Personal Social Inventory, 2006-07

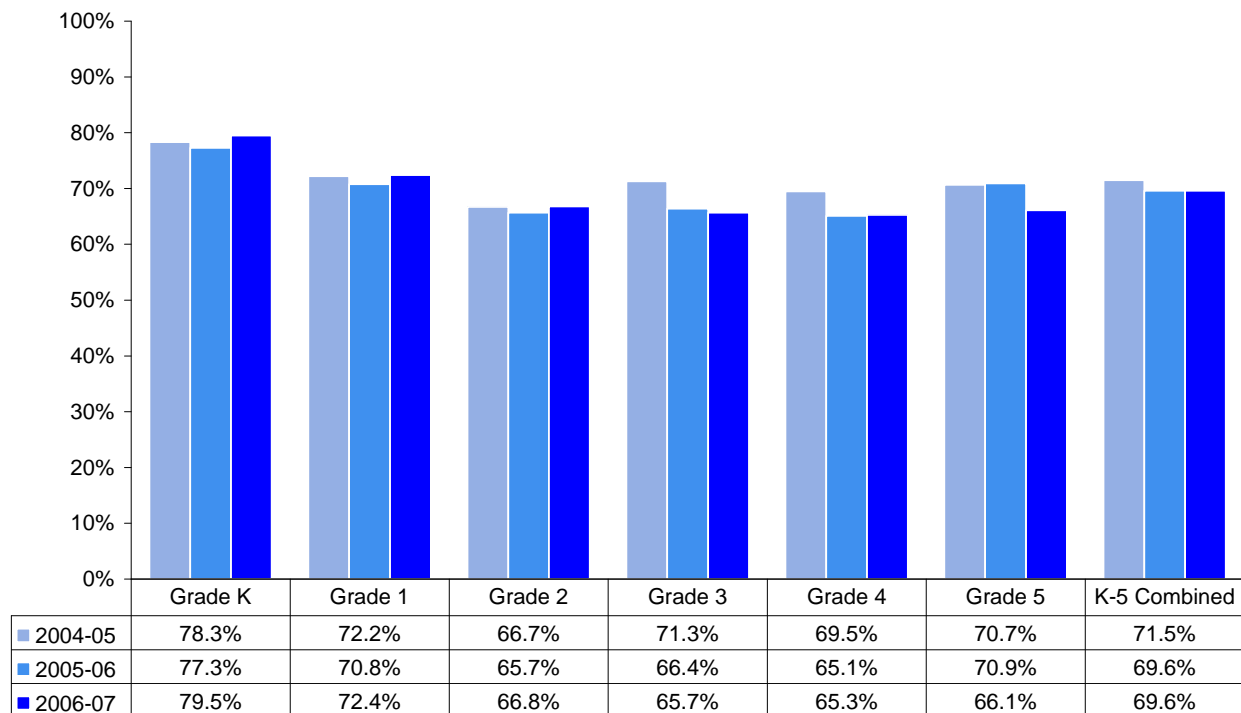
	Recognizes and responds to name		Appropriate choice in work and play		Takes care of personal needs		Solves problems		Interacts with adults and peers		Responds to adult direction		Follows school routines		Verbalizes feelings and shows empathy to others		Engages in play	
	05-06	06-07	05-06	06-07	05-06	06-07	05-06	06-07	05-06	06-07	05-06	06-07	05-06	06-07	05-06	06-07	05-06	06-07
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1	1.0	1.5	2.3	2.2	3.0	2.5	5.4	4.9	2.0	2.4	3.4	3.3	7.8	6.3	4.6	4.7	2.2	2.3
2	6.4	6.8	21.5	21.1	15.2	14.7	27.7	28.1	19.6	18.5	25.1	23.3	23.8	22.3	17.0	16.4	10.7	10.5
3	65.1	67.5	59.2	62.0	59.3	64.0	53.7	56.1	58.2	61.0	52.8	57.1	51.1	55.6	61.2	64.4	40.1	39.3
4	23.4	24.1	12.9	14.7	18.4	18.7	9.1	10.9	15.9	18.1	14.6	16.3	13.1	15.7	13.0	14.4	42.7	47.9
Null Answer	4.1	0.0	4.1	0.0	4.1	0.0	4.1	0.0	4.2	0.0	4.2	0.0	4.2	0.0	4.2	0.0	4.3	0.0

WCPSS K-5 ASSESSMENT MATHEMATICS RESULTS

This section summarizes trends for K-5 assessment results in 2006-07 in mathematics. Although the mathematics curriculum changed in 2004-05, the EOG test was not updated until 2005-06. The mathematics strands were adjusted on K-5 assessments in 2004-05 to match the new, more concepts-based curriculum. All schools had a transition year in 2004-05 in which the new curriculum, plus the skills unique to the old curriculum at that grade level, were addressed to ensure full instruction. Project Achieve schools decided to focus more on the old curriculum than the new in 2004-05, making the transition fully in 2005-06. Thus, by school year 2006-07, all aspects of mathematics teaching and assessment reflected the new standards and curriculum and teachers had at least a year of experience with these new standards.

Figure 24 compares the percentage of students proficient in all five mathematics strands over a three-year period. Overall, just under 70% of students showed proficiency on all strands, varying from 65.3% at grade 4 to 79.5% at kindergarten. Although little change in proficiency rates occurred between 2004-05 and 2006-07 for kindergarten and grades 1 and 2, there was a downward trend in mastery percentages for grades 3, 4, and 5, with the result that the overall percentage of students proficient declined. A similar decline was observed on EOG mathematics outcomes for 2005-06, but a slight rebound occurred in 2006-07, as will be seen in the section discussing the EOG mathematics outcomes.

Figure 24
Mathematics Proficiency for All Strands,
2004-05 to 2006-07, Grades K-5

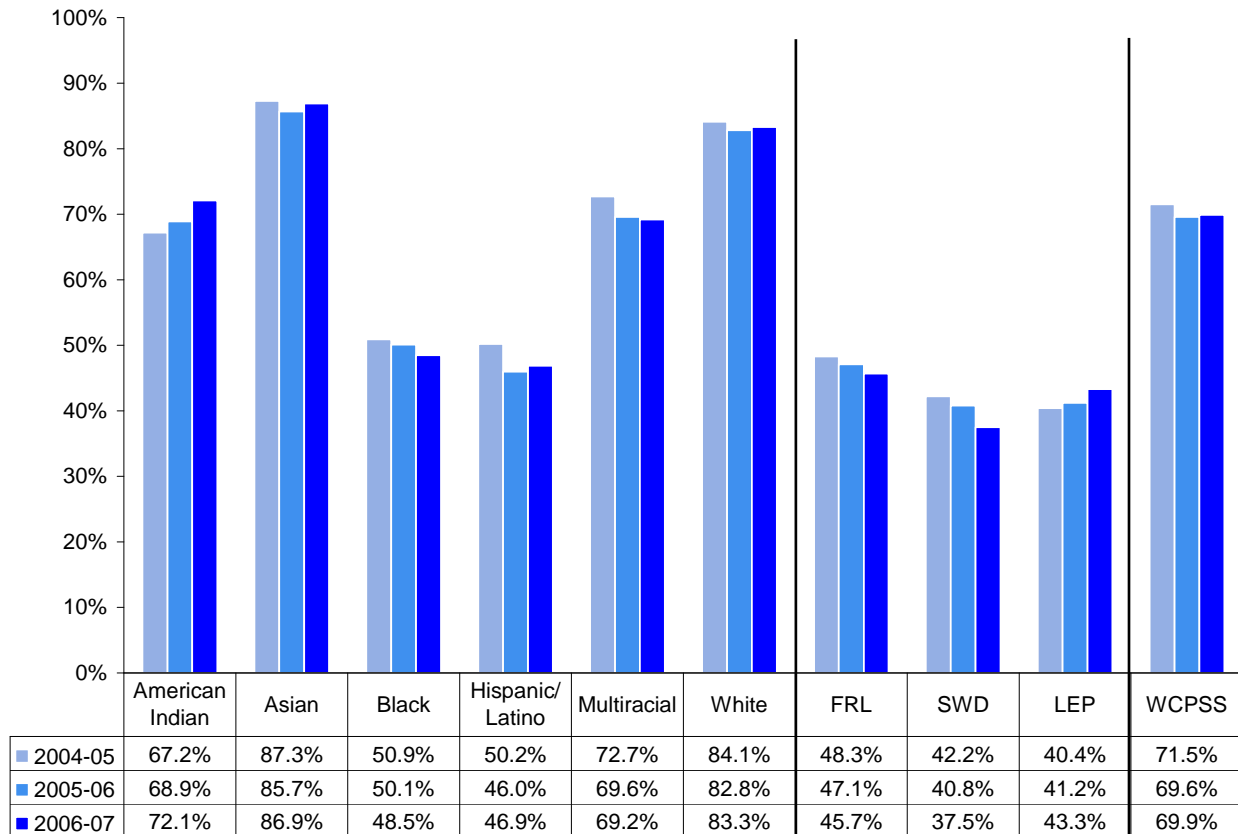


Data Source: Annual K-5 Assessment Data and Annual WCPSS Student Locator Data.

Gaps among ethnic groups for mathematics proficiency are evident, as shown in Figure 25.

- Results from 2004-05 to 2006-07 show the lowest performance in mathematics among Black/African American students, Hispanic/Latino, FRL students, SWD students, and LEP students. All groups had less than half of the students scoring proficient in 2006-07.
- Overall, results over the three year period show slight to modest declines in proficiency, with the exception of American Indian students and LEP students. Hispanic/Latino students experienced the largest decline.
- In comparison to 2004-05 results for higher performing subgroups, Asian students, Multiracial students, and White students experienced modest decreases in the percentage mastering all mathematics strands.
- In 2006-07, the largest gap was between Asian students and SWD students, at 49 percentage points.

Figure 25
Students Proficient in All Mathematics Strands by Subgroups
2004-05 to 2006-07, Grades K-5



Note: Ethnic data are unduplicated counts and academic risk-group data are duplicated counts.

Data Source: Annual K-5 Assessment Data and Annual WCPSS Student Locator Data.

END-OF-GRADE MULTIPLE-CHOICE MATHEMATICS TEST RESULTS

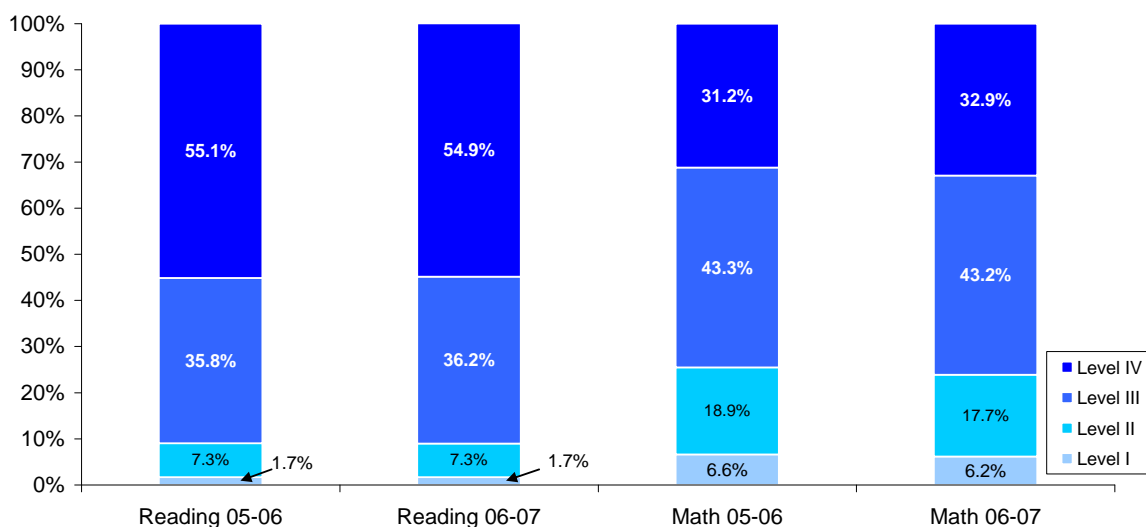
EOG Scores by Achievement Level across Subjects

The achievement level score categorizes student performance on EOG tests according to four broad levels, defined by the North Carolina Department of Public Instruction (DPI). More detail on the definition of each level is included in the Literacy part of this Testing Outcomes section. In general, Levels III and IV represent mastery of grade-level work or beyond, while Levels I and II represent non-mastery or inconsistent mastery, respectively.

New mathematics tests were used in 2005-06 for the first time, with new achievement level cut scores for proficiency. The mathematics standard is more challenging on this edition of the test than in past years. Therefore, comparisons of proficiency rates prior to 2005-06 are not made in this report.

Before 2005-06, the percentage of students demonstrating proficiency levels in reading and mathematics were similar. An analysis of all grade 3-8 EOG scores by achievement level for 2006-07 shows the mathematics proficiency standard is more difficult to meet than the reading standard. As Figure 26 shows, in reading, 91% of students scored proficient, while 76% students scored at the level considered proficient in mathematics. It is clear from the figure that the percent of students attaining Level IV was much lower in mathematics than in reading (33% as compared with 55%). Moreover, there was a larger percentage of students scoring in the Level II and Level I range in mathematics than in reading.

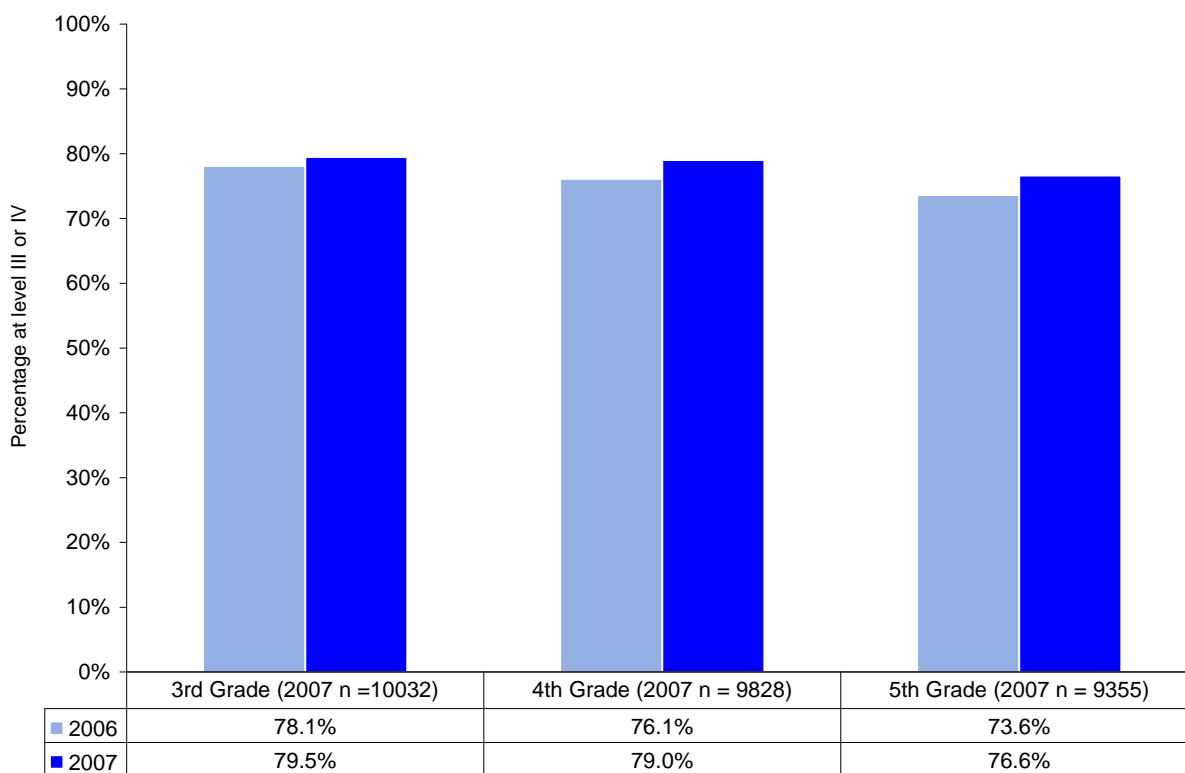
Figure 26
Reading and Mathematics, EOG Scores by Achievement Level,
2005-06 to 2006-07, Grades 3-8



Mathematics EOG Results

In 2006-07, the overall percent of students in grades 3 through 8 who scored proficient was 76%. Moreover, the percentage of students proficient in mathematics at each grade level rose somewhat from the percent proficient in the previous year. The improvement was especially marked in grades 4 and 5, where increases of about 3 percentage points were seen. Overall, about 4 out of 5 students in Grades 3-5 scored proficient in mathematics in 2006-07, as Figure 27 shows.

Figure 27
Students Proficient on Mathematics EOG by Grade Level,
2005-06 to 2006-07, Grades 3-5



Mathematics EOG Results by Ethnicity, 2006-07

It may be seen in Figure 28 that all ethnic subgroups improved performance in 2006-07 as compared with the prior year. Overall, close to 79% of students were performing at/above grade level. Improvements by sub-group ranged from just over one-half of a percentage point for Asian students to four percentage points for Black/African American students (and 10% for the small group of American Indian students). In addition, inspection of Figures 28 and 29 reveals that:

- The percent proficient varied from 56% to almost 94% for ethnic subgroups, with the highest percentages proficient among Asian and White students, and the lowest among Black/African American and Hispanic/Latino students
- The achievement gap between Black/African American and White students was large, at 34 percentage points.

No consistent pattern of gender differences was evident within ethnicity.

Figure 28
Students Proficient on Mathematics EOG by Ethnicity
2005-06 to 2006-07 Grades 3-5

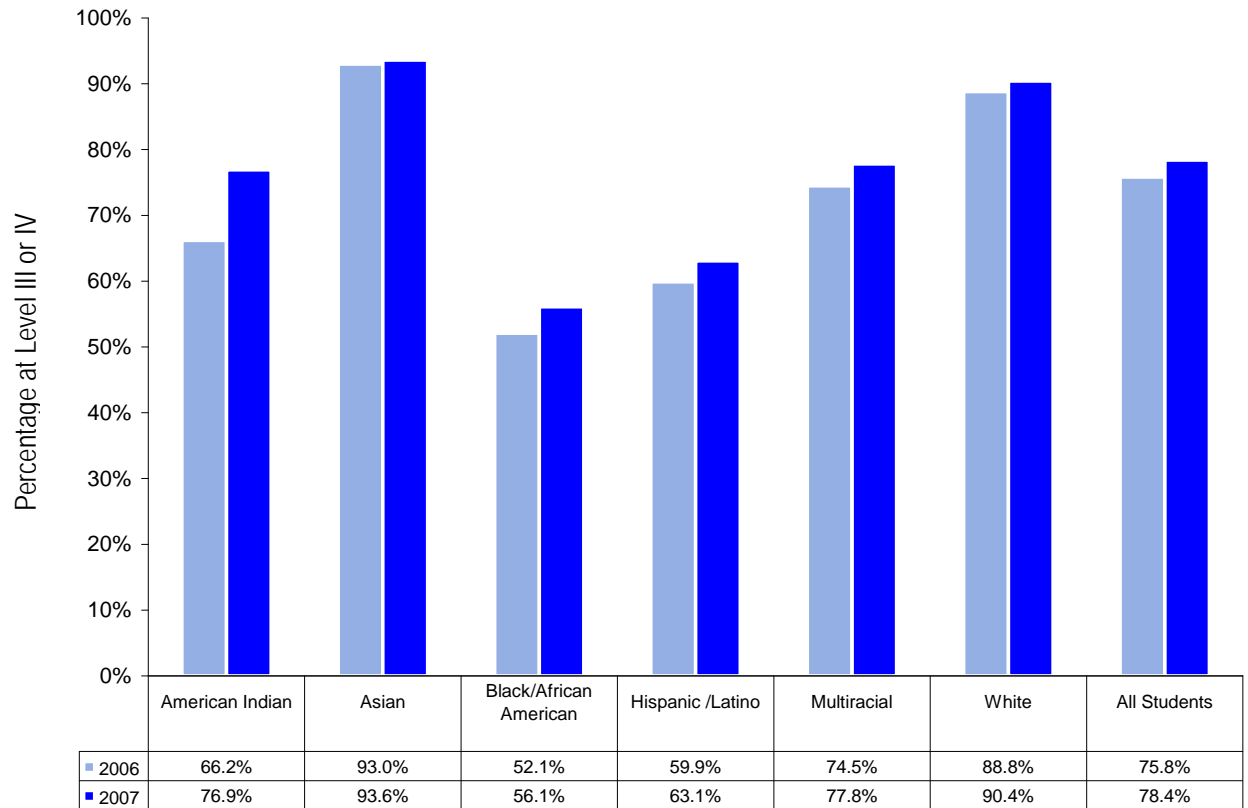
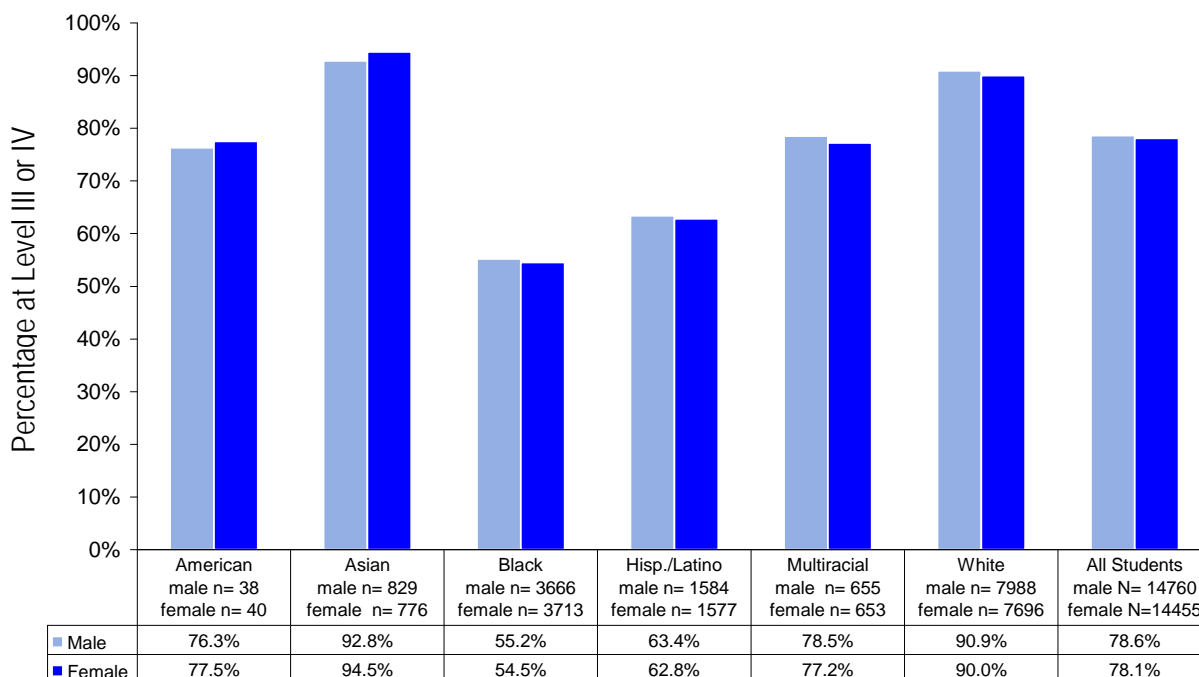


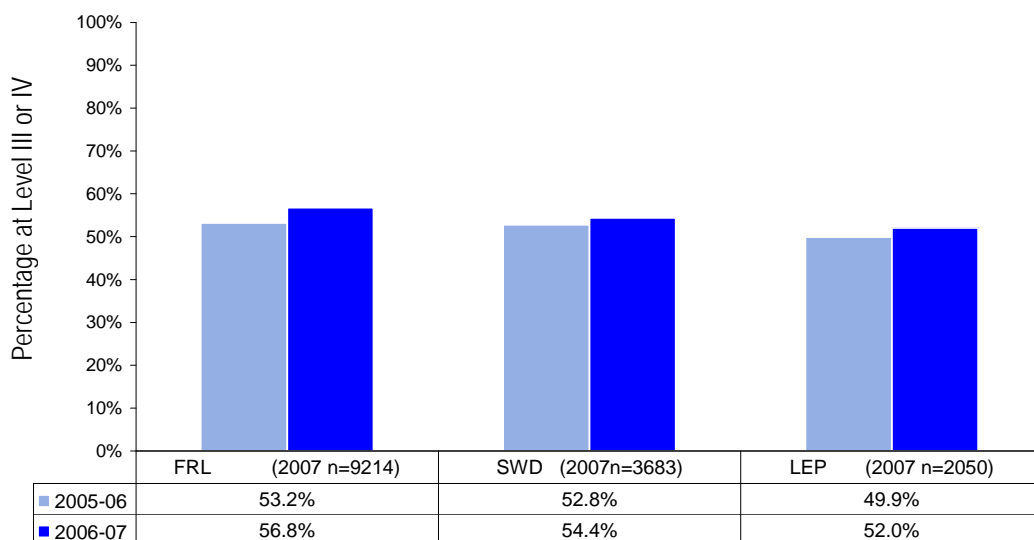
Figure 29
Students Proficient on Mathematics EOG by Ethnicity and Gender
Spring 2007, Grades 3-5



Figures 30 and 31 present information about the performance of students who experience risk factors. Somewhat higher percentages of students with each of these risk factors were working on grade level in 2006-07 than was true in the previous year (Figure 30). Moreover, it may be observed from these figures that:

- Lower percentages of students who were FRL, SWD, or LEP scored at grade level than students without such characteristics; students with two or three of these characteristics showed the lowest proficiency levels .
- FRL, SWD, and LEP students all showed proficiency rates above 50% (52% to 56.8%). As shown in Figure 30, when these results are broken down further, the percentage of students scoring proficient was higher for students with only one of these academic risk factors than for students with more than one. About two thirds of students with only one risk factor performed at/above grade level. However, when risk factors were compounded, the percentage of proficient students fell rapidly. Only one third of students who were SWD and FRL or SWD, FRL, and LEP scored at proficient levels.

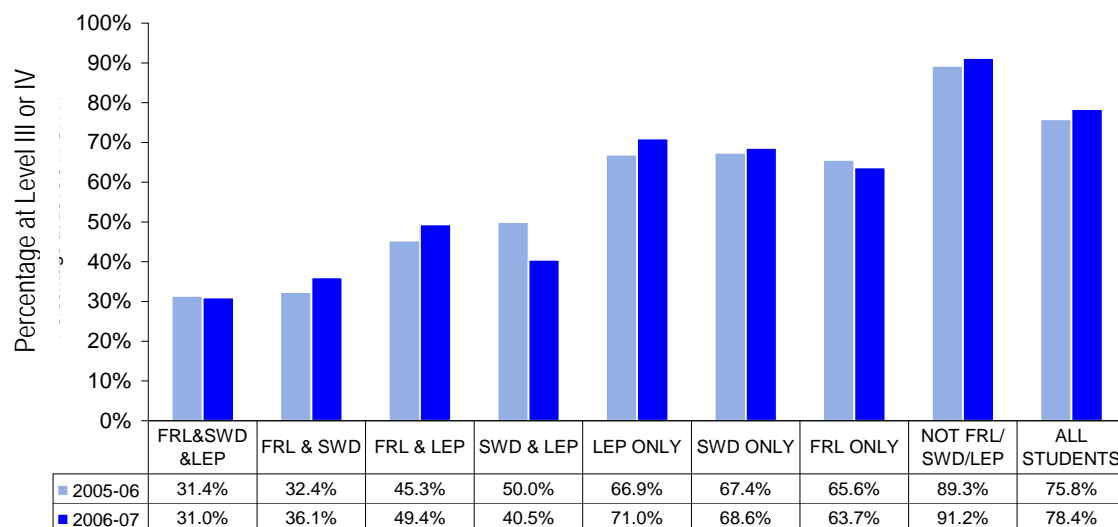
Figure 30
Students Proficient on Mathematics EOG by Academic Risk Factors
2005-06 to 2006-07, Grades 3-5



Note: Duplicated count.

Figure 31 shows the percent of students in grades 3-5 within each academic risk factor or combination. It should be remembered that some of these groups (e.g., FRL&SWD&LEP) include very small numbers of students.

Figure 31
Students Proficient on Mathematics EOG by Academic Risk Subgroup Combinations,
2005-06 to 2006-07, Grades 3-5



Note: Unduplicated counts.

OTHER STUDENT OUTCOMES

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% 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 17).

Grade Level

Table 17 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 1 in 5 ninth graders were not promoted to tenth grade this past spring.

- 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 17
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
	2006-07	5,856	4.6%	121,712	95.4%	127,568

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.

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

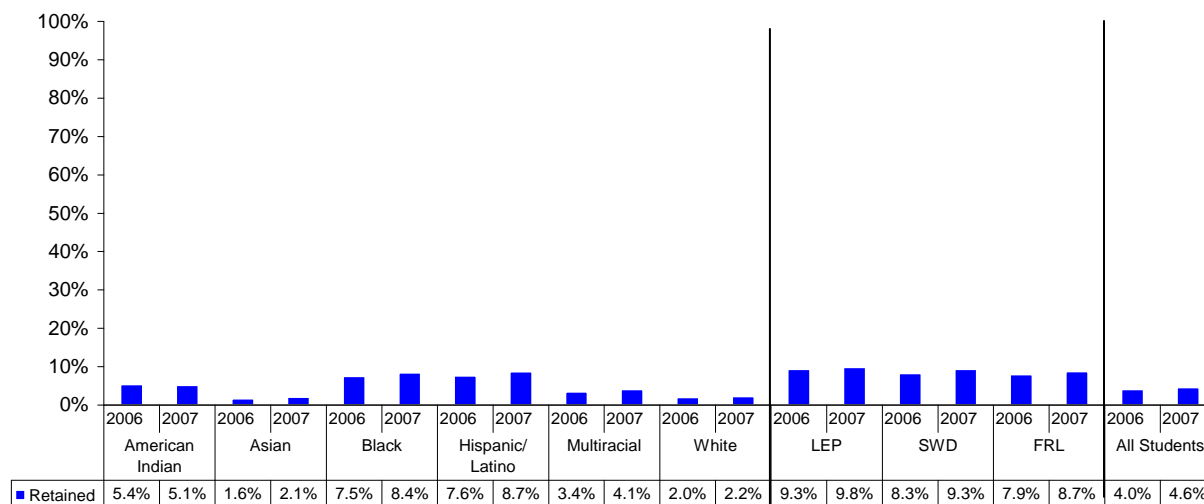
required courses where the student fails the EOC, but this is generally only done when the student has passed the course based on the other criteria. At the elementary level, higher rates of retention at kindergarten and grade 1 may reflect the belief that retention is preferable in the early grade levels 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 32
Percentage of Students Retained for Each NCLB Group, 2005-06 and 2006-07,
Grades K - 12



2006 N = 120,014

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.

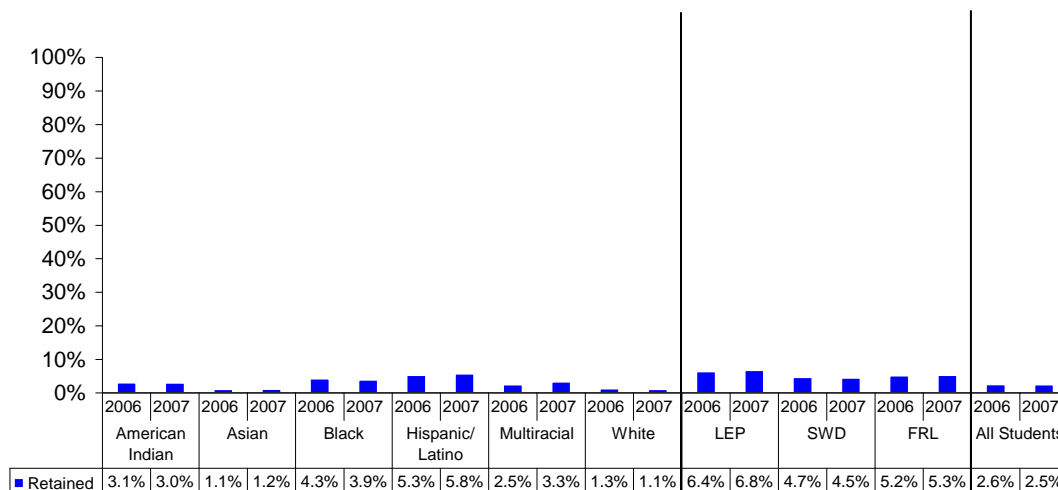
Data Source: WCPSS Student Information Systems data file of K-12 students flagged as promoted, graduated, or retained as of the end of the 2005-06 and 2006-07 school years.

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

As Figure 33 shows, for grades K-5:

- The patterns of students retained by subgroup at the elementary level were similar to the overall (K-12) results.
- At the elementary level, the percentage of students retained was lower than the retention rates K-12 and, as indicated earlier, declined in several of the elementary grades.

Figure 33
Percentage of Students Retained for Each NCLB Group, 2005-06 and 2006-07, Grades K-5



2006 *N* = 59,365

2007 *N* = 63,331

- Note:
1. Ethnic counts are unduplicated, but other counts are duplicated.
 2. Sub group 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 LEP students retained increased slightly from 6.4% in 2006 to 6.8% in 2007.

Characteristics of Retained Students

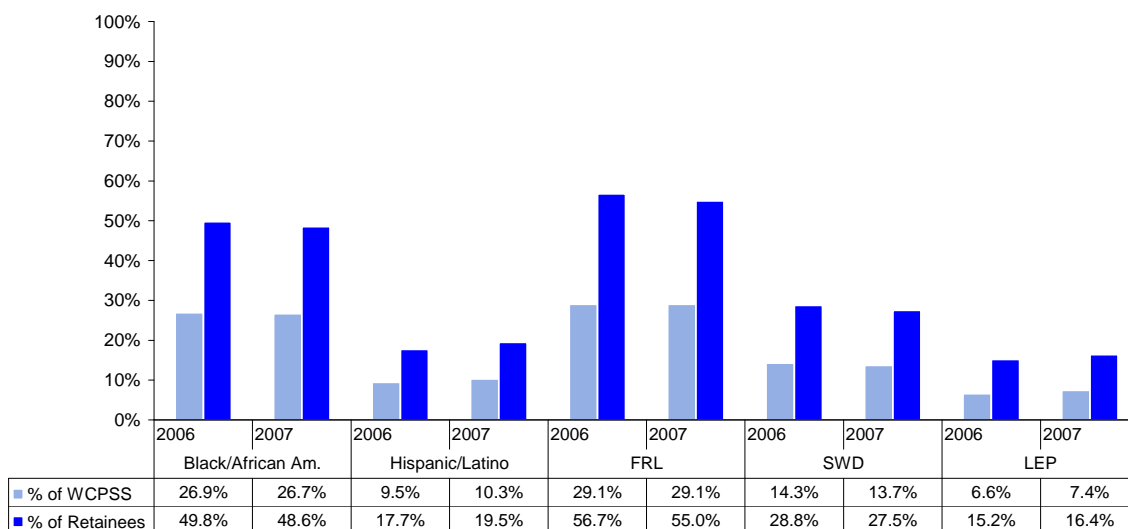
Subgroups and Gender

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 male students than female students were retained for all subgroups studied.

The proportion of students retained within each NCLB group is not equally distributed. Figure 34 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 34
Student Subgroups Over-Represented Among Those Retained in WCPSS
Relative to WCPSS: Grades K-12, 2005-06 and 2006-07



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.

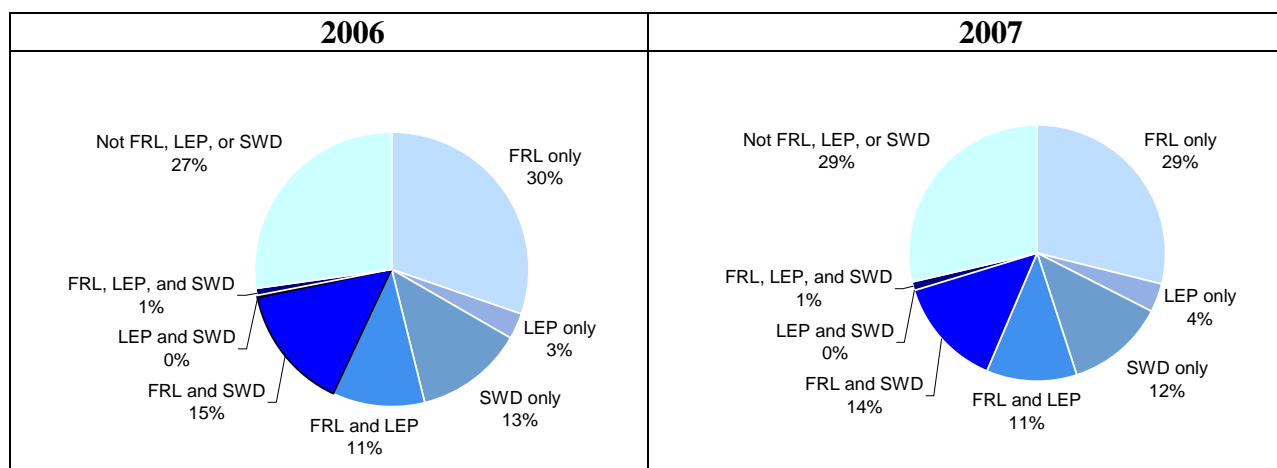
Interpretation Example: The percentage of retainees who were Hispanic/Latino increased from 17.7% in 2006 to 19.5% in 2007. This is greater than their percentage in the overall WCPSS population (9.5% and 10.3% of WCPSS students in 2005-06 and 2006-07).

Academic Risk Factor Combinations

Figure 35 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 the figure. 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 35
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.

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.

COGNITIVE ABILITIES TEST (CogAT) 2006-07

CogAT—Description and WCPSS Use

The CogAT is a group-administered ability test battery used to assess students' abilities in reasoning and problem solving. WCPSS uses CogAT, along with the Iowa Test of Basic Skills (ITBS), as part of the identification process for the Academically Gifted Program. Because all 3rd-grade students take the CogAT each November, results also provide a sense of our students' ability relative to the national norm. WCPSS ITBS results, on the other hand, cannot be compared to national norms because not all students are assessed with this instrument.

The CogAT is given in three subtests – Verbal, Quantitative, and Nonverbal. These three areas have been found to be associated with academic success in school.

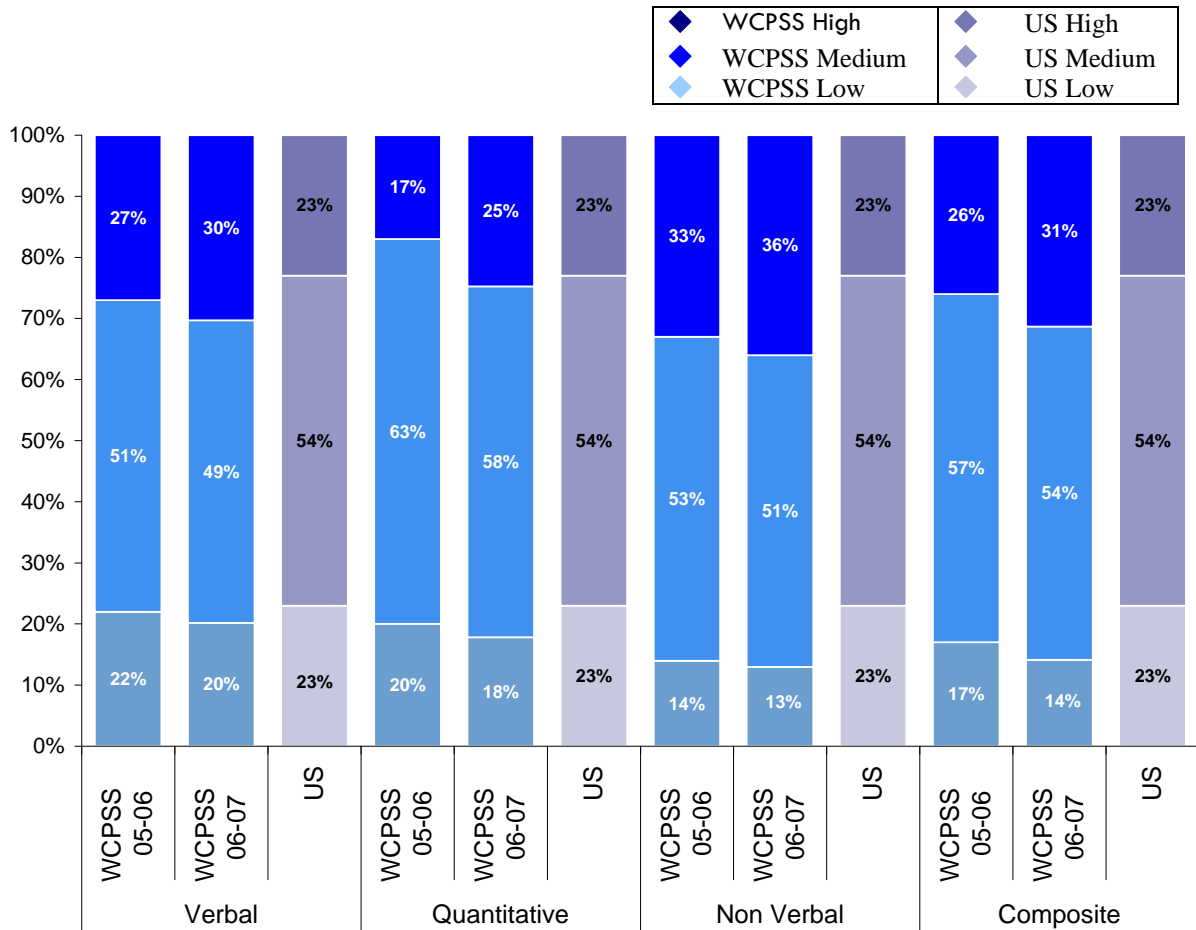
- The Verbal Battery consists of verbal classification, sentence completion, and verbal analogies. This battery appraises flexibility, fluency, and adaptability in working with verbal material and solving verbal problems.
- The Quantitative Battery consists of quantitative relations, number series, and equation building. This battery appraises flexibility and fluency in working with quantitative symbols and concepts.
- The Nonverbal Battery consists of questions on figure classification, figure analogies, and figure analysis. Items use only geometric shapes and figures and require no reading.

The median age percentile score for WCPSS students in 2006-07 was 61, slightly higher than 2005-06 (57) and the students tested nationwide (50). The WCPSS population is slightly above the national norm in the abilities measured by the CogAT. Scores of the nonverbal (median percentile of 64) and verbal scales (median percentile of 58) were stronger than on the quantitative section (54). Thus, our students tend to be slightly stronger on verbal skills that relate primarily to literacy skills and slightly less strong on quantitative skills that relate to mathematics ability. Nonverbal scores were actually the strongest, and this reasoning test likely relates most strongly to mathematics.

In 2006-07, WCPSS had slightly higher percentages of students scoring in the high range of scores and smaller percentages scoring in the low ranges on the CogAT compared to the U.S.. High, medium, and low are groupings of stanine scores, which are based on percentages of a normal curve.

- **Low:** Stanine 1-3 represent students scoring considerably below average; scores represent the lowest 14% of those tested in WCPSS as compared with about 23% nationally.
- **Medium:** Stanine 4-6 represent just below to just above average scores; this represents 54% of the scores in WCPSS as well as nationally.
- **High:** Stanine 7-9 represents students scoring considerably above average; scores are the top 31% of those tested in WCPSS, but 23% nationally.

Figure 36
Overall Results on CogAT, 2005-07, Grade 3



CogAT results suggest that WCPSS students, as of 3rd grade, could be expected to score at or just above national norms, based on student ability. In 2006-07, WCPSS had larger percentages in the upper range of the CogAT than was true for the national sample, and, conversely, smaller percentages in the lower range. Moreover, there appears to have been a qualitative difference in the group of students who took the test in 2006-07 as compared to the 2005-06 group, with slightly more 2006-07 students scoring in the highest stanine range.

ACCOUNTABILITY OUTCOMES

ABCs RESULTS

The ABCs of Accountability Model for elementary and middle schools was first implemented in the 1996-97 school year. 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 the coming 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). Tests included in this calculation for elementary schools include EOG reading, EOG mathematics, and writing.

The growth component deals with students' scores from one year to the next, and includes only students with both scores in a subject who attended a school for 140 days or more. Growth calculations are based solely on EOG. In addition to meeting the 140 days in membership requirement, for a student's test scores to be included in the growth part of the model, the student must have a score from the previous year in the same subject in order to measure their growth.

ABCs Growth Standards

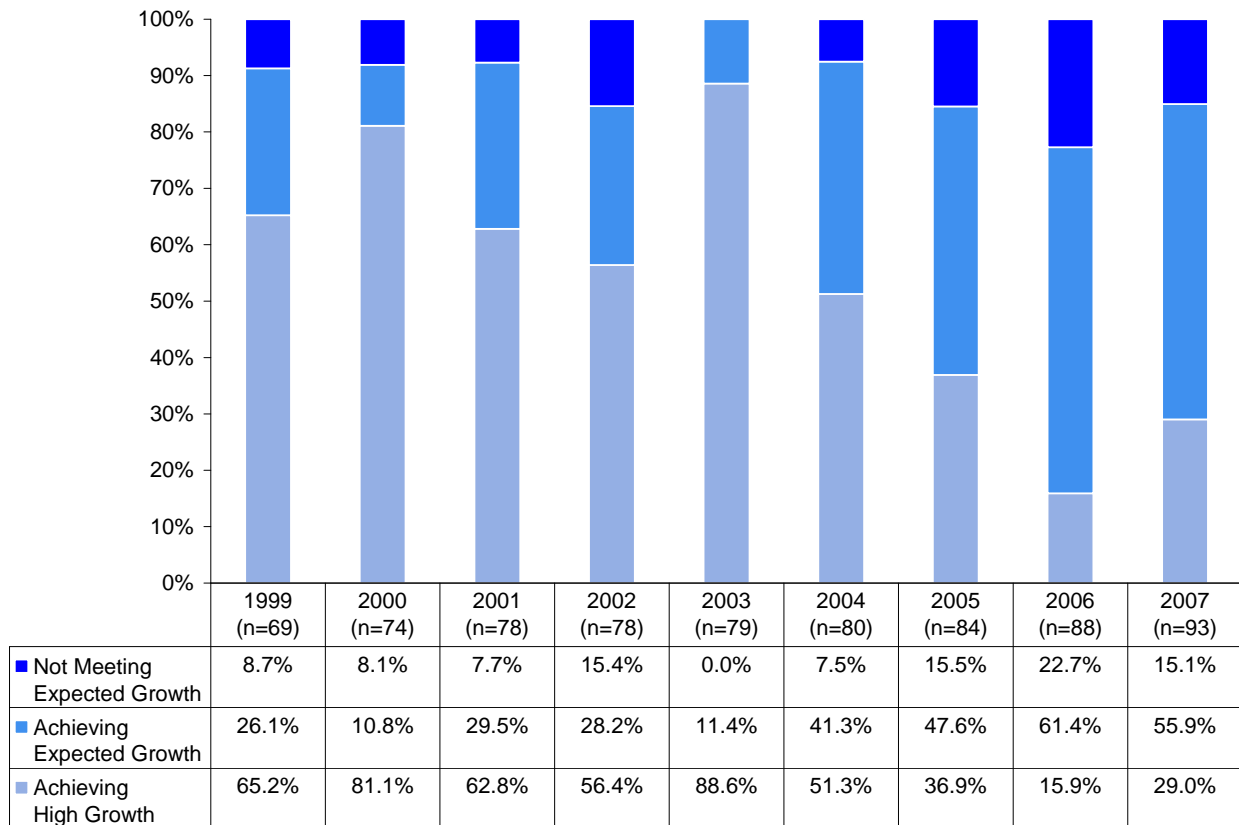
The basic assumption of the ABCs growth component is that a student should be expected to do at least as well on various EOG tests as she or he has done on prior EOG tests compared to all other students who took the test in the standard-setting year. The standard-setting year is typically the first year 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 Reading and Mathematics.

- Schools that meet the Expected Growth standard demonstrate an average amount of growth across all students equal to one year's growth.
- Schools that meet the High Growth standard must first meet the Expected Growth standard. Then, they must also have 60% of students meet their individual growth targets across all tests.

Results for Spring of 1999 through Spring of 2007 are shown in Figure 37.

- Most WCPSS elementary schools have met Expected or High Growth standards every year the ABCs has been in effect.
- Almost 85% of elementary schools met Expected or High Growth in Spring of 2007 in WCPSS, an improvement of 7.6 percentage points from Spring 2006. Conversely, the percentage of schools not meeting Expected Growth standards decreased in 2006-07 to 15%, compared to 23% in Spring of 2006.
- The percentage of schools meeting Expected Growth versus High Growth has fluctuated more over the years than the Expected or High Growth.
- The percentage of schools able to show High Growth had been declining since spring of 2003, but increased in 2006-07, perhaps indicating that the trend has reversed.

Figure 37
ABCs Growth Summary, WCPSS Over Time, Grades 3-5, Spring 1999 to Spring 2007

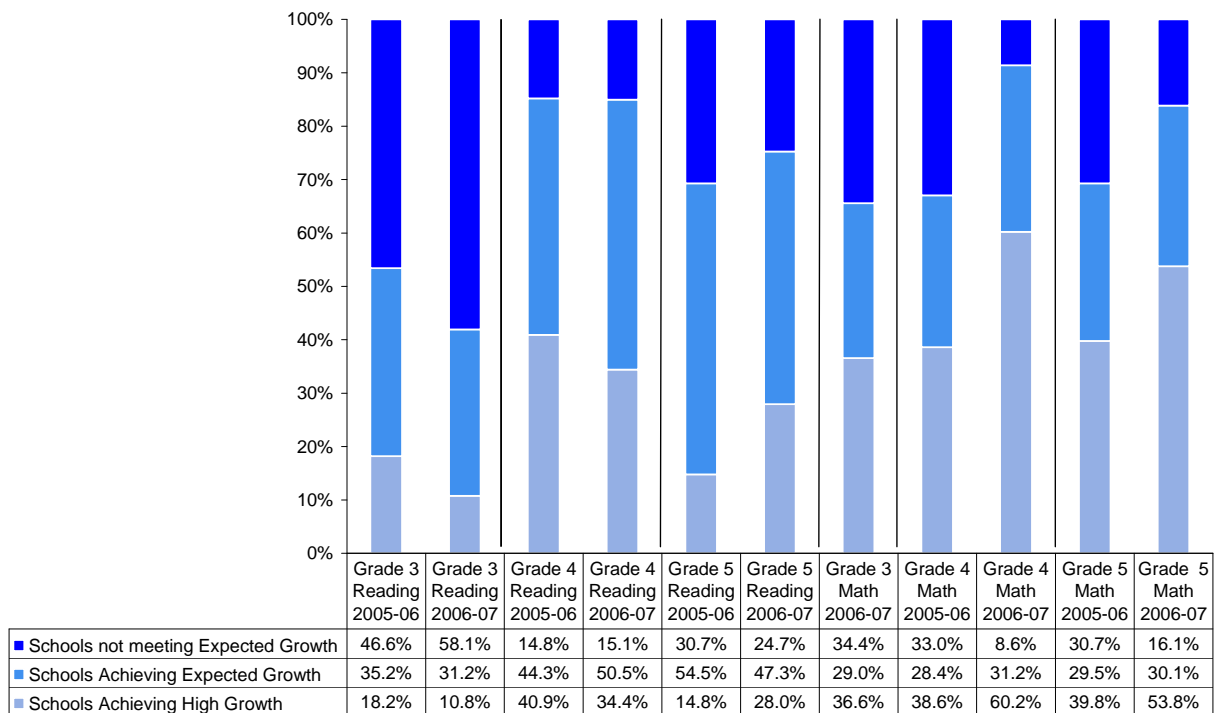


Interpretation Example: in 2007, 29% of elementary schools met high growth; this is an increase of 13% from the previous year.

When examined by grade in 2006-07:

- Schools had the most difficult time meeting the third grade standards in reading and in mathematics: 58% and 34% of schools were unable to meet the 3rd grade reading and mathematics growth target in 2006-07.
- Interestingly, a larger percentage of schools attained high growth in mathematics by grade level than was true for reading.

Figure 38
WCPSS Elementary Schools ABCs Growth Results by Grade and Subject,
2005-06 and 2006-07



N = 93

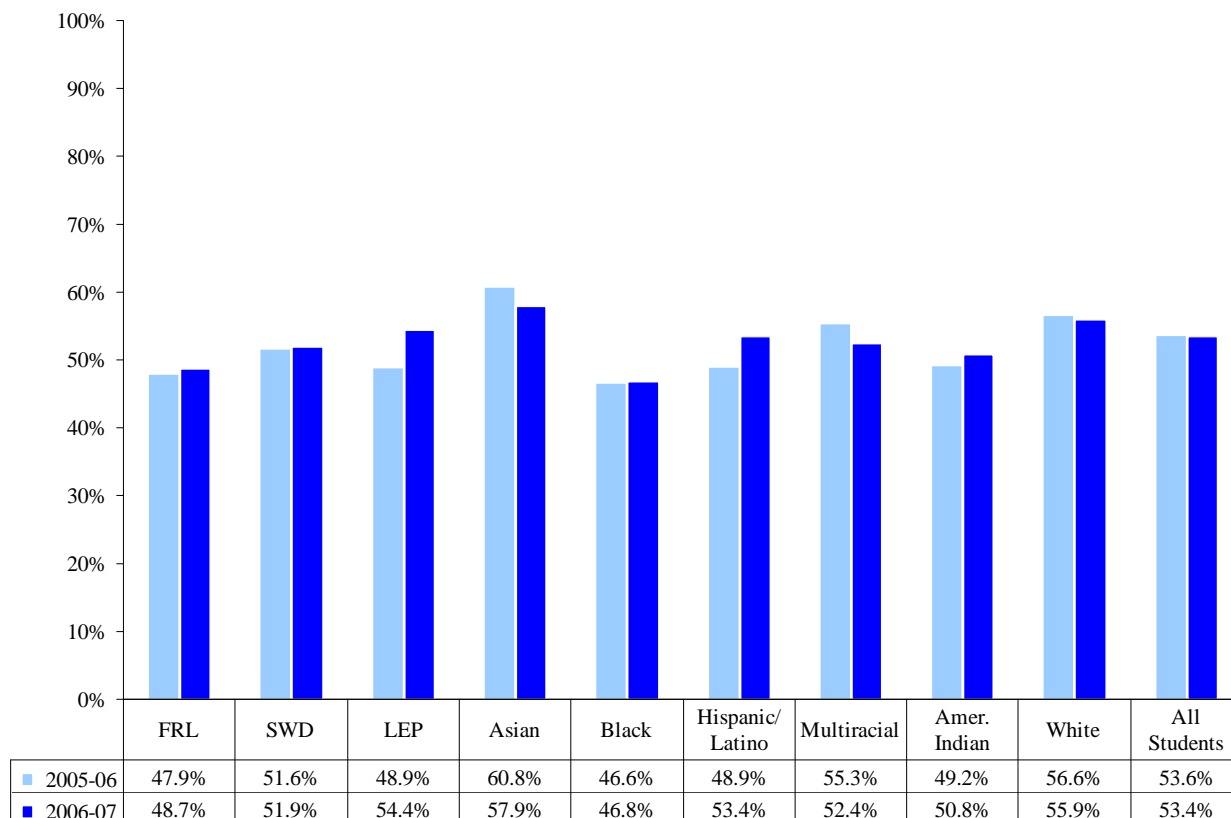
Note: Grade 3 Math was not included in the ABCs model in 2005-06

Interpretation Example: During the 2006-07 school year a little over 60% of WCPSS elementary schools achieved high growth in 4th grade mathematics. This was more than 20% higher than the previous year where 38.6% of elementary schools achieved high growth in grade 4 mathematics.

As Figure 39 demonstrates, the overall percentage of WCPSS students reaching their growth target for ABCs in reading was about 53% in 2006-07. No group met high growth.

- The percentage of each group meeting their growth target varied from 47% to 58%.
- The highest percentage of students meeting their growth targets was found for Asian and White students (58% and 56%, respectively). The lowest percentage of students meeting their growth targets were Black/African American and FRL students (47% and 49%, respectively). These percentages are slightly lower than those recorded in 2005-06, but the relationships among the groups have not changed.
- Compared to 2005-06, most groups had small increases in the percentage of students meeting reading growth targets, with the exception of Asian, Multiracial, and White students. LEP and Hispanic/Latino students showed the largest increases.

Figure 39
Percentage of Students by NCLB Subgroups Meeting Growth Targets in Reading, 2005-06 and 2006-07, Grades 3-5

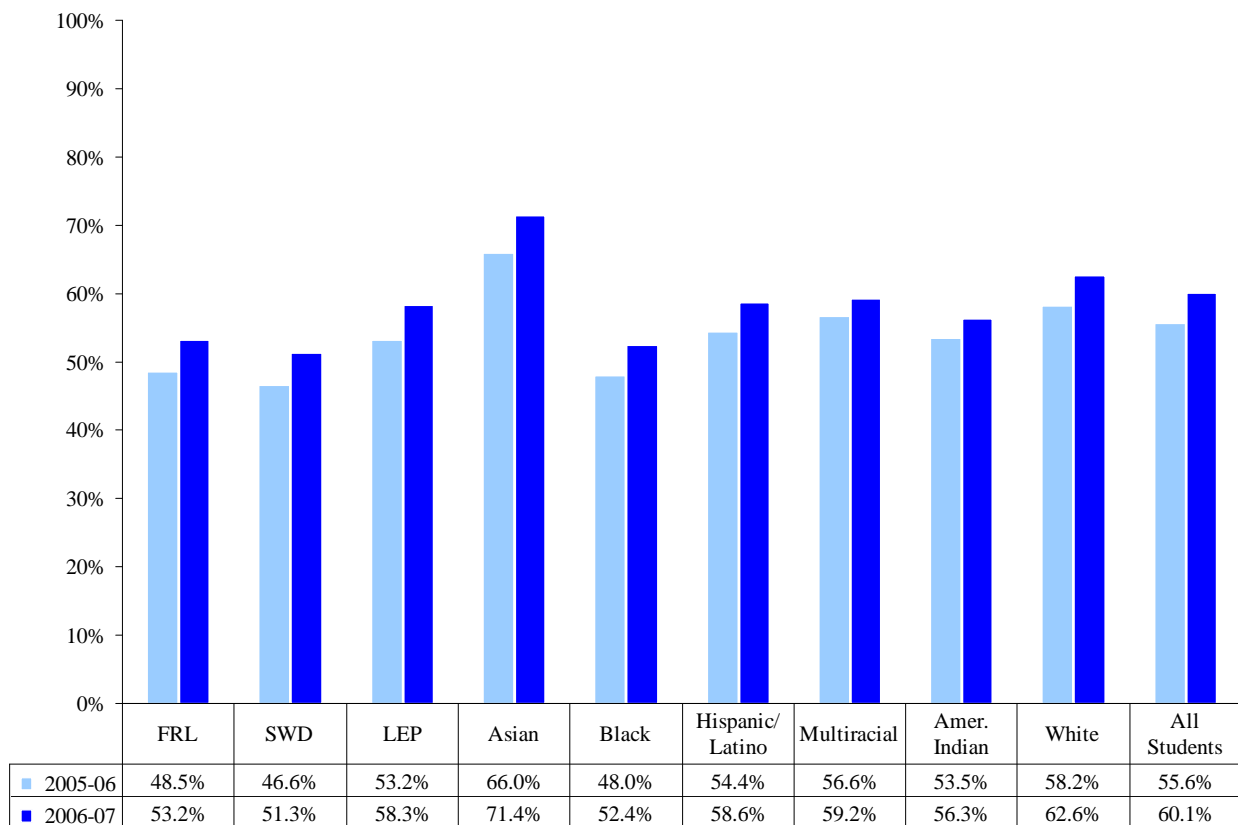


Interpretation Example: 48.7 % of FRL (economically disadvantaged) students met their growth expectation in reading.

As Figure 40 demonstrates, the overall percentage of WCPSS students reaching their growth target for ABCs in mathematics was 60%. Most groups did not meet high growth.

- The percentage of each group meeting their growth target varied from 51% to 71% (a wider range than was true in reading).
- The highest percentage of students meeting their growth targets was found for Asian and White students (71% and 63%, respectively). The lowest percentage of students meeting their growth targets was evident for FRL, SWD, and Black/African American students (51-52%).
- The percentage of students meeting growth targets in mathematics was up for all subgroups between 2005-06 and 2006-07.

Figure 40
Percentage of WCPSS Students Meeting Growth Targets in Mathematics
by NCLB Subgroups, 2005-06 and 2006-07, Grades 3-5



Interpretation Example: 58.3% of Limited English Proficient students met their growth expectations for mathematics.

ABCs Performance Standards

The second component of the ABCs Accountability Model is the Performance Composite, which is based on the percentage of proficient scores across all tests in a school (i.e., Levels III and IV). Definitions of these levels are described in the Testing Outcomes (EOG) section of this report. Since 2005-06, Performance Composites have generally gone down for elementary schools statewide, due primarily to higher standards for the EOG Mathematics tests.

School Recognitions

State recognitions are based on both the growth and performance components. In order to be awarded a state recognition, a 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 18 provides the definition for each recognition category the state applied to schools under this accountability program in 2006-07, and the number of WCPSS schools that earned each type of recognition are displayed in both Table 18 and Figure 41.

Table 18
ABCs Awards and Recognitions 2006-07

Recognition Category	# Elem. Schools (N=93)
<i>Schools Making High Growth</i> attained their high growth standard. Certified staff members each receive up to \$1,500 and teacher assistants up to \$500.	27
<i>Schools Making Expected Growth</i> 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.	52
<i>Honor Schools of Excellence</i> are schools that made at least expected growth, had at least 90% of their students score at or above Achievement Level III, and met federal Adequate Yearly Progress (AYP) standards. These schools receive banners, certificates, and incentive awards for expected or high growth.	8
<i>Schools of Excellence</i> 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. These schools receive banners, certificates, and incentive awards for expected or high growth.	1
<i>Schools of Distinction</i> are schools that made at least expected growth and had at least 80% of their students score at or above Achievement Level III (but were not Honor Schools of Excellence or Schools of Excellence). They receive plaques, certificates, and incentive awards for expected or high growth.	41
<i>Schools of Progress</i> are schools that made at least expected growth and had at least 60% of their students score at or above Achievement Level III (but were not Honor Schools of Excellence or Schools of Excellence or Distinction). They receive certificates and incentive awards for expected or high growth.	29
<i>Schools Receiving No Recognition</i> did not make their expected growth standards but had at least 60% of their students score at or above Achievement Level III.	13
<i>Priority Schools</i> are schools that had less than 60% of their students score at or above Achievement Level III, irrespective of making their expected growth standards, and are not Low-Performing Schools.	1
<i>Low-Performing Schools</i> are those that failed to meet their expected growth standards and had significantly less than 50% of their students score at or above Achievement Level III.	0

N = 93

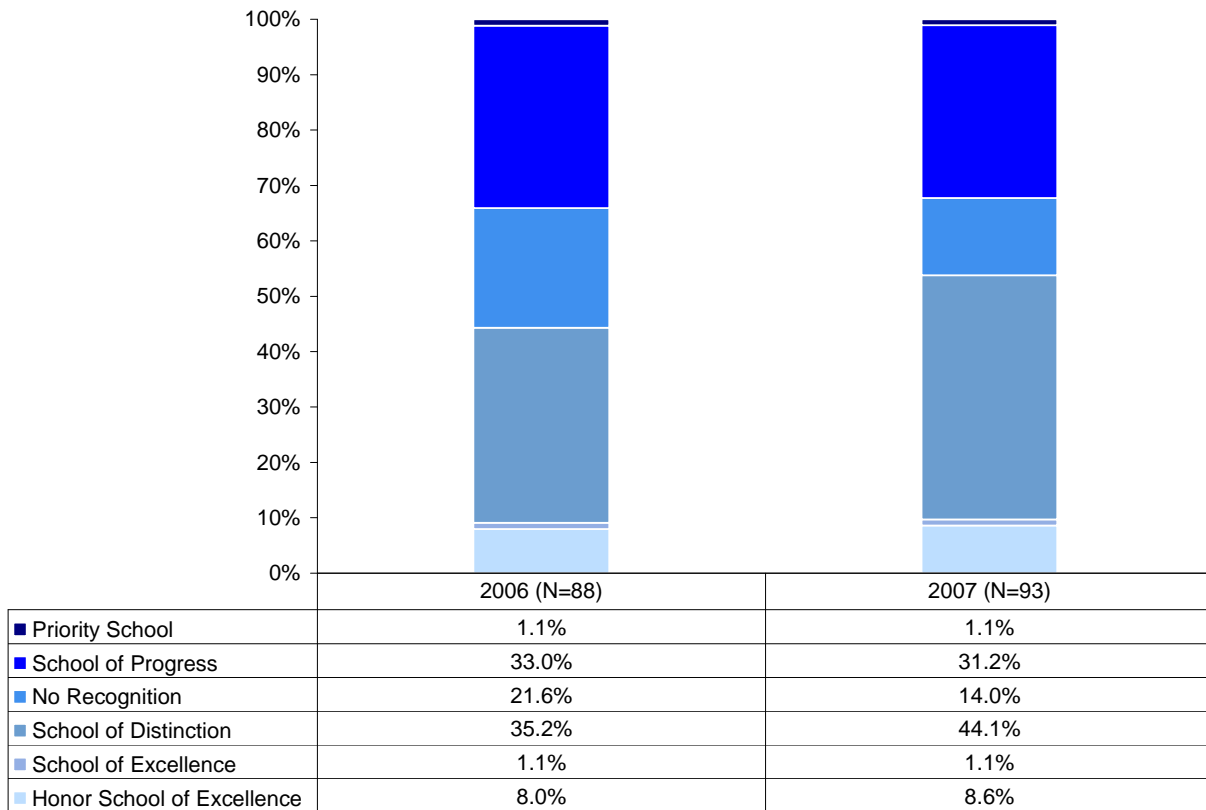
Note: Adapted from <http://www.ncpublicschools.org/docs/accountability/reporting/abc/2006-07/execsumm.html>.

Schools may be counted in top section above the shaded row as well as bottom section.

With the changes in both the growth component and the performance component in mathematics, fewer WCPSS schools met the standards for the most positive recognitions in 2005-06 than in previous years. This was the trend statewide as well. Results improved in 2006-07 compared to 2005-06.

- In 2007, nine elementary schools (10%) met the recognition standards for School of Excellence or Honor School of Excellence, one more than in the previous year. This may, however be compared to 2005, when 55% of WCPSS elementary schools met this standard.
- *School of Distinction* was the most common designation, meaning schools made at least expected growth and had at least 80% of their test scores at or above grade level. The largest change from 2005-06 to 2006-07 was evident here, with 10 additional schools (35% to 44%) meeting the standards for this recognition.
- *School of Progress* was the next most common designation, meaning schools met at least Expected Growth and had between 60% and 79% of their test scores at or above grade level (Achievement Level III-IV). This category stayed about even in WPCSS between 2005-06 and 2006-07.
- A decrease was evident in the *No Recognition* category between 2005-06 and 2006-07, with an 8% decrease in schools receiving this designation.
- No WCPSS schools fell into the Low-Performing category either year.

Figure 41
Percentage of WCPSS Elementary Schools by ABCs Designation, 2005-06 and 2006-07



N = 93

Data Source: <http://abcs.ncpublicschools.org/abcs/>

Interpretation Example: 44% of the 93 elementary schools in WCPSS earned the recognition category of School of Distinction in 2006-07, an increase of 9%.

WCPSS results compare favorably to state results for 2006-07, with higher percentages of students in the highest categories of Honor School of Excellence/School of Excellence (10% versus 5%) and School of Distinction (35% versus 24%) categories.

AYP RESULTS

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 EOG tests for grades 3-8 and selected 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 SWD students.

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 DPI's 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.

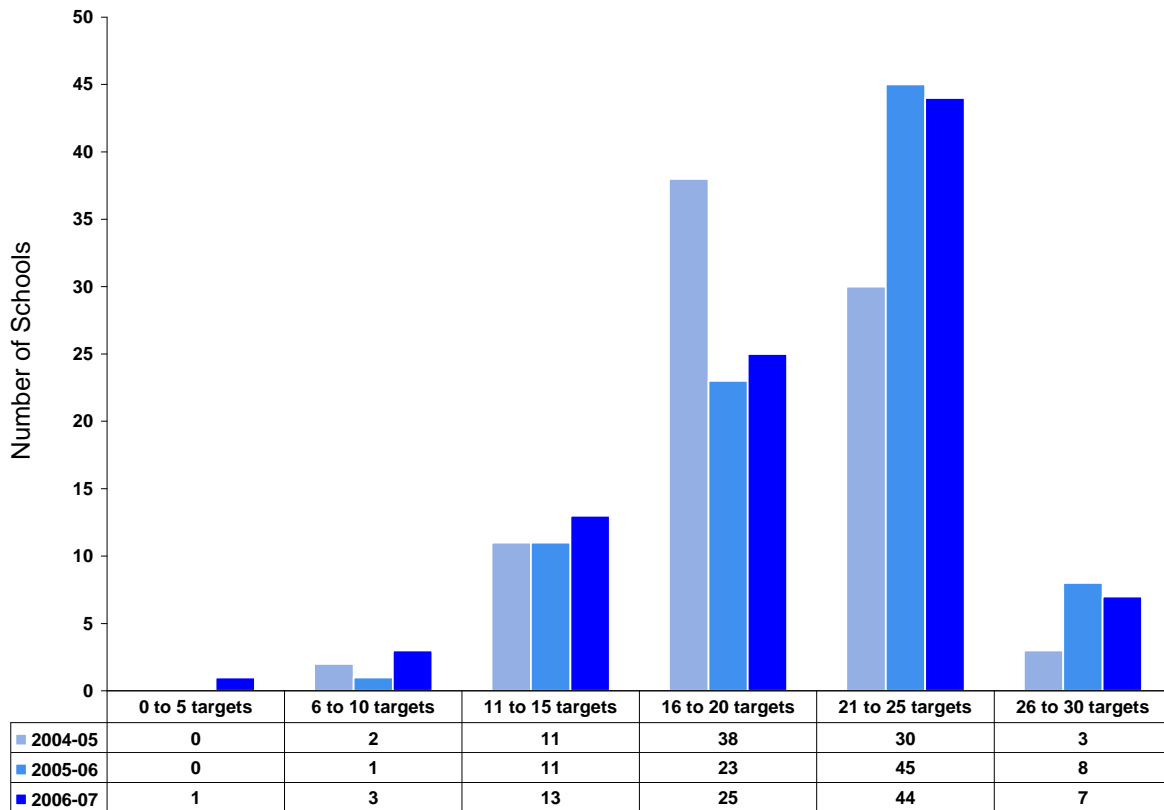
If a particular subgroup meets the 95% participation rate but does not meet the target proficiency for a subject area, the subgroup can still meet AYP through what is referred to in the law as the “Safe Harbor” provision. The Safe Harbor provision is invoked if the subgroup has reduced the percentage 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.

Overall Elementary School Results

Most WCPSS elementary schools had at least 11 targets for AYP, with the most common number of targets being 21 to 25 see Figure 42.

Figure 42
Number of Schools with Various Numbers of AYP Targets, 2004-05 through 2006-07



Interpretation Example: In 2006-07 there were 25 schools that had 16-20 AYP targets (to be met) as compared to 23 schools in 2005-06 and 38 schools in 2004-05.

Fewer elementary schools met AYP in 2006-07 than in previous years.

- Overall, 51% (47 of 93) elementary schools made AYP by meeting all of their targets, slightly less than 2005-06 (53%) and considerably less than the 80% seen in 2004-05 (see Figure 43).
- Another 32% of schools missed only 1 or 2 targets. However, 14% missed 3-5 targets. (see Figure 44).
- Mathematics targets were more likely to be missed in 2006-07, as was true the prior year. The subgroups most likely to miss targets were SWD and FRL and Black/African American students (see Figure 45).

Figure 43
Elementary Schools Making AYP, Spring 2003 to Spring 2007

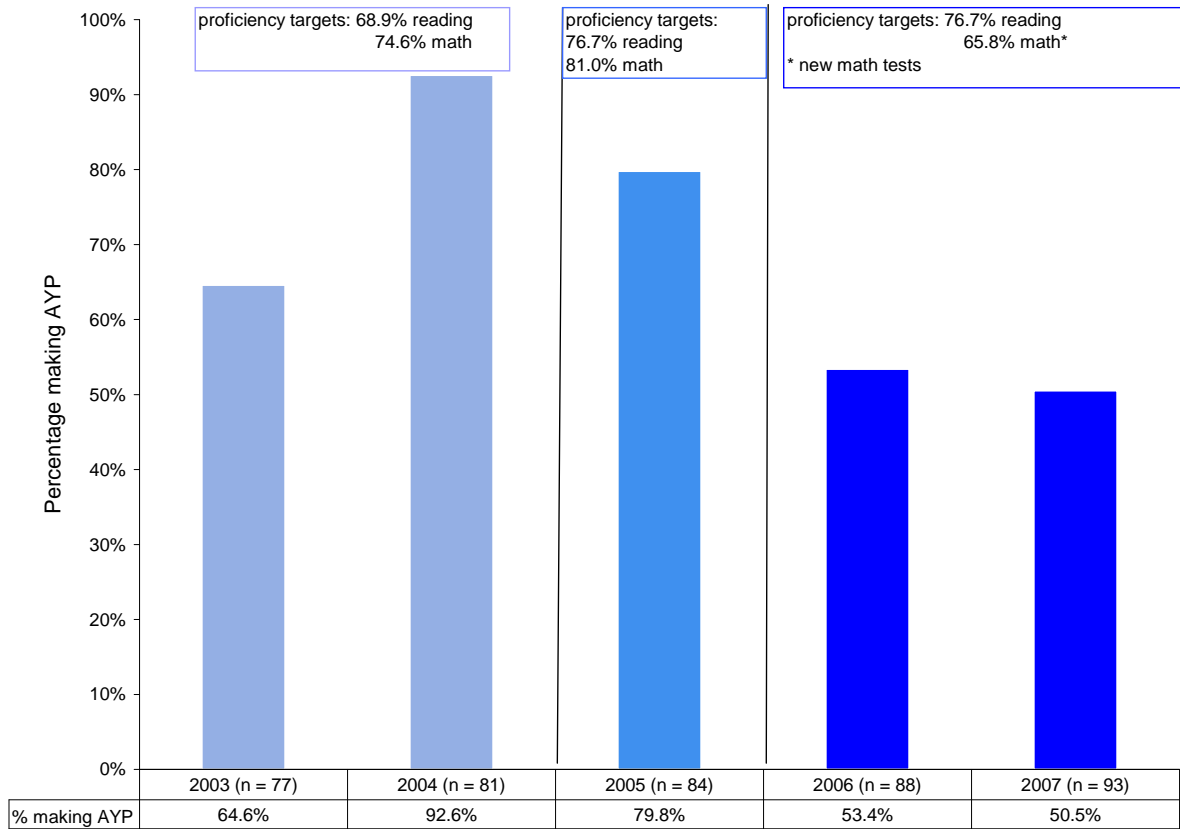
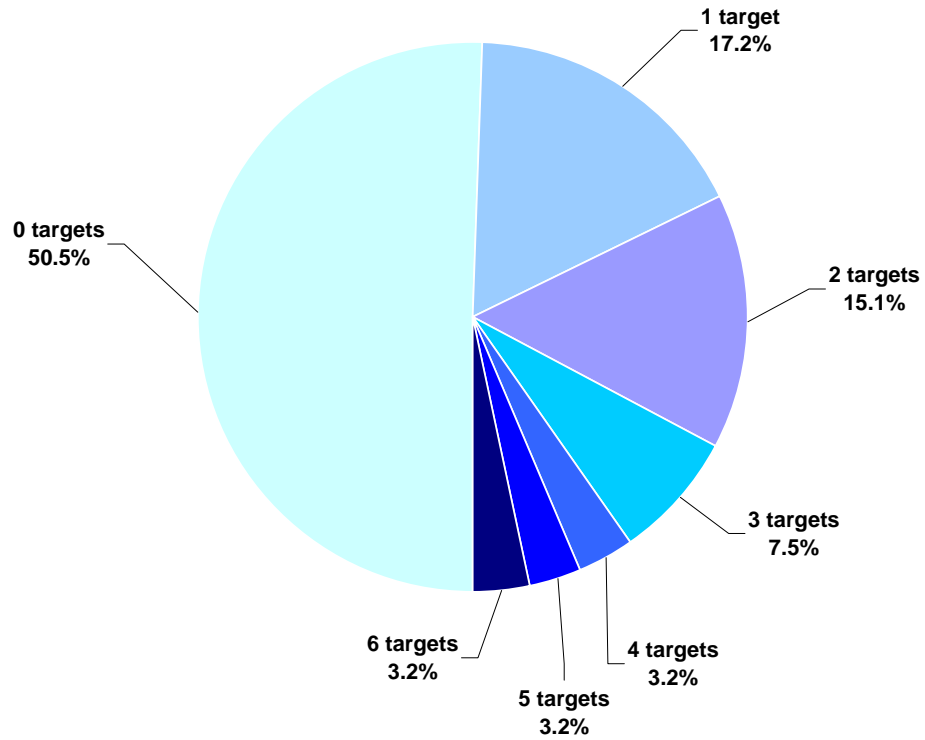


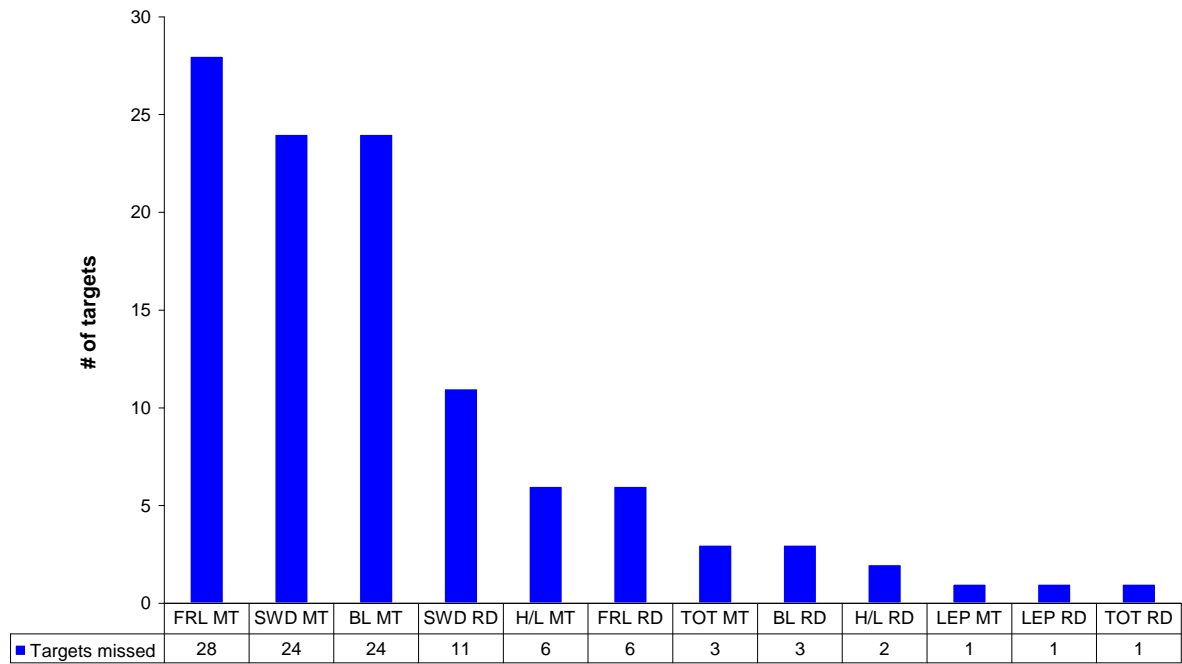
Figure 44
Percent of Elementary Schools and Number of Targets Missed, 2006-07



N = 93

Interpretation Example: 50.5% of 93 elementary schools missed 0 AYP targets.

Figure 45
Number of Targets Missed by Subgroup and Subject, 2006-07, Grades 3-5



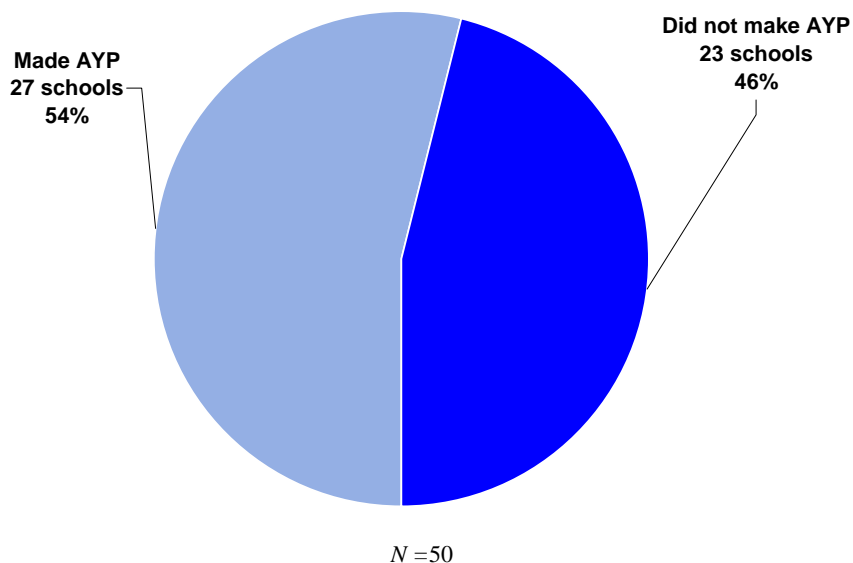
Note: 1. MT = Math; RD = Reading
 2. Total targets missed were 110.
 Interpretation Example: 28 elementary schools missed the FRL mathematics target.

Title I Results

Within the Title I schools:

- Similar to the pattern for all elementary schools, 27 out of 50 (54%) met AYP standards (see Figure 46).
- Of the 23 Title I schools that missed AYP, 14 only missed mathematics targets, none missed reading targets, and nine missed both reading and mathematics targets.

Figure 46
Title I Schools by AYP Status, 2006-07, Grades 3-5



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, whichever 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 system-wide plan for improvement is being implemented in response, as required by federal law.

EFFECTIVE PRACTICES

As has been demonstrated throughout this report, the academic performance of some specific groups of students falls below the desired level for all students. In order to better understand how schools and teachers can be as effective as possible with students, staff of the Evaluation & Research department has, over the last three years, been studying effective practice at the elementary, middle, and high school levels. While the research methodologies employed are modified to fit existing data bases, all of these studies rest on the observed success of teachers and schools in meeting the learning needs of students. The two studies that deal with elementary schools are summarized below.

EFFECTIVE PRACTICES FOR MULTI-RISK STUDENTS

School-level practices can make a difference in promoting the achievement growth of multiple-risk students.

Analysis of Wake County Public School System (WCPSS) EOG performance results indicates that those students who have the most difficulty reaching accountability standards in WCPSS schools are those with more than one of the following characteristics: are eligible for FRL, have disabilities (SWD), and/or have limited English proficiency (LEP). E&R studied practices used in schools which showed very positive achievement growth for multi-risk students over several years compared to schools that did not.

Results suggest school-level practices can make a difference in promoting the achievement growth of multiple-risk students (Baenen et al, 2006).

At the elementary school level, the following factors seemed to support multiple-risk students' achievement:

- high expectations of students
- positive attitudes about being able to meet students' needs with the resources available
- supportive administrative leadership that allocates resources effectively
- training on working with students with special needs
- formal and information collaboration to help students
- more frequent use of teacher-led instruction.

Staff in schools in both groups reported using data to support students' instruction, but the quality of use was not studied. Stronger schools also used curriculum pacing guides provided by central staff more often than those in the lower-growth schools.

Schools are encouraged to use these results as a springboard for discussion of how their school approaches the instruction of students who have multiple academic needs, and whether these findings suggest some practices to incorporate or improve their schools.

<input checked="" type="checkbox"/>	High Expectations and Positive Attitudes
<input checked="" type="checkbox"/>	Challenging Learning Experiences for All Students
<input checked="" type="checkbox"/>	Supportive Leadership
<input checked="" type="checkbox"/>	Collaboration
<input checked="" type="checkbox"/>	Effective Use of Data
<input checked="" type="checkbox"/>	Curriculum and Resources

WCPSS STUDENTS WITH MULTIPLE ACADEMIC RISKS: ACHIEVEMENT PATTERNS AND SCHOOL EXPERIENCES

(For full report: http://www.wcpss.net/evaluation-research/reports/2007/0623effective_multirisk_study.pdf)

Purpose

Analysis of student data has shown that students who qualify for FRL, SWD students, and students with limited English proficiency (LEP) are less likely to score at grade level, and that those with more than one of these academic risk factors show lower achievement than those students with just one. Yet many of these students do score at grade level on state and local assessments.

Recently, Wake County Public School System's (WCPSS) Evaluation and Research Department undertook a second study of students with multiple academic risk factors, focusing on achievement patterns over time and school and home experiences that support positive achievement patterns.

Findings

The quantitative analyses in our study revealed that about 11% of WCPSS elementary and middle school students have two or three academic risk factors. Fifth and eighth grade students' improvement on achievement test scores, compared to similar students (expressed as residual scores), revealed that only 7-16% of students had all positive or all negative residuals for three consecutive years. This indicates these students clearly had increases in their achievement scores above or below those predicted for three years in a row.

For the qualitative part of our study, we examined the cases of 16 students with multiple academic risks in more depth. Eight had positive patterns of achievement over time and eight had negative patterns. The group with positive achievement patterns was more likely than the group with negative achievement patterns to show signs of resiliency. Resiliency is *the ability to overcome difficult circumstances, often with the help of school staff, families, and/or the community* (McElrath, 2005).

Students with positive achievement patterns are more likely to display a positive sense of purpose, with a strong motivation to succeed and high expectations. These students often have strong support and exposure to hobbies/high-interest activities as well.

Resilient students often take on extra challenges with the belief that they could succeed. They exhibit a sense of autonomy, an understanding of their relation to others, positive feelings about their capabilities, and an ability to overcome negative circumstances.

They also are likely to have social competence and problem-solving skills, with the ability to identify and access resources and learn "how they learn."

Traits of Resiliency: One student in our study had a fierce determination to come to school every day even though he faced health concerns.

Another student who overcame multiple academic risks took music lessons at school for many years and was involved in sports as well.

Another student in our study was taken from a traumatic living situation and placed with a close relative. With substantial support and encouragement, she was able to improve her grades after the move, despite her disability as well as her challenging life circumstances.

Student Characteristics

Students with positive achievement patterns were more likely to enjoy reading. They also showed formative assessment scores that were at grade level or that improved to grade level over time. Regardless of achievement, most students planned to attend college; expectations tended to mirror those of their parents or guardians.

Most of the LEP students entered WCPSS in kindergarten or first grade with limited English skills. Those with more positive achievement patterns showed stronger English skills over time. Most LEP students studied were older than is typical for their grade. Attendance and conduct tended to be strong, although occasional conduct issues were more common for LEP students who showed more negative achievement patterns. LEP students with positive achievement patterns also were more likely to be involved in sports, academic activities, or music.

Attendance and conduct were stronger for SWD students with positive achievement patterns.

School Experiences

Many classroom strategies mentioned as important in national research were used with both groups in our study. Teachers of all students in our study mentioned the importance of building relationships with students and of using small-group instruction. Providing supplemental report and coordinating efforts across teachers and were also commonly mentioned.

Providing structure was mentioned more often for cases with positive achievement patterns than cases with negative achievement patterns overall. Within the LEP and SWD cases, some practices were commonly noted:

- For LEP students, flexible grouping, positive reinforcement, homework, and motivation strategies were mentioned as being helpful.
- Among SWD students, modifying assignments and breaking them down into smaller chunks was mentioned much more often for cases with positive achievement patterns.

Family Support

Homework completion was an issue for all students in our study. In LEP cases with positive achievement patterns, students were more likely to complete homework than in cases with negative achievement patterns. Decreased English-language ability among parents of LEP students made it difficult for most of them to provide homework support. However, most LEP students did receive some support at home from parents or older siblings.

Among SWD students, only half of the students in our study completed homework regularly. In SWD cases with positive achievement patterns, students had somewhat stronger homework and family support than cases with negative achievement patterns.

Parents and guardians of students with positive achievement patterns were more likely to attend school conferences than were the cases with negative achievement patterns. Among LEP cases, fathers from the cases with positive achievement patterns were more likely to attend conferences.

How Teachers and Families Can Help

It is important for teachers and other school staff to know students well enough to determine their interests, what motivates them, the challenges they face, their past school successes and issues, and the resources available in the home or in their community. All of these can be critical to success in school. Teachers should reach out to involve parents and the community in whatever ways are feasible.

Teachers can suggest low-cost or free community activities related to student interests or instructional activities to provide intellectually stimulating opportunities that might also build connections and learning. Helping students understand the relationship between grades in school and future college attendance and careers can motivate students who want to attend college primarily to play sports. Finding alternative ways to give students practice without homework can have a positive impact on students facing multiple risks. Teachers can also help students understand the critical role of homework and test performance in bolstering grades.

Teachers and/or families can secure tutoring or mentoring for students at school or in the community. This is particularly important for LEP students who are still learning English, given that schools' ESL programs (especially at the elementary level) focus primarily on a specific language arts curriculum rather than on providing students with help for class work or homework.

Parents and guardians are key to helping children succeed in school. They can provide a place for homework, check on homework completion, limit television and video viewing, and show that they place a high value on their child's learning.

Students with multiple academic risks clearly can achieve academically. We hope this newsletter provides ideas that help students facing multiple risks to succeed in school. By working together, parents and teachers can influence students' personal, social, and academic skills to make a positive difference in their success in school and beyond.

DISCUSSION

This report departs from the past traditions of the Evaluation and Research Department of WCPSS and continues one begun last year. In the past, we have primarily produced reports that presented and analyzed results from single tests. That is, one report might present and analyze data for End of Grade tests, while another report would be devoted to Advanced Placement tests. Last year, however, we shifted the unit of analysis from specific tests to levels of schooling. That is, we brought together a variety of measures of performance for each of the three levels of school: elementary, middle, and high. We believed that by presenting a comprehensive look at a variety of outcomes, the reader of this report would be better able to create a synthesis of information about the schooling outcomes. Many people commented favorably on this change and so we have decided to continue this year, looking at a variety of measures of student performance in 2006-07. WCPSS continues to show strong performance on most student outcome measures, despite the rapid population growth and increasingly diverse population served in WCPSS. However, continuing and new challenges must be addressed.

This new approach to analysis of school outcomes is being undertaken in an environment that has experienced major changes in measurement of school performance. Of particular importance are changes originating at the state level. It is widely known, for example, that the State Board of Education has taken a policy position that is intended to bring about greater rigor in both the curricula offered to North Carolina students and greater rigor in the tests that measure mastery of those curricula.

During 2004, the mathematics Standard Course of Study was overhauled to increase the rigor of learning objectives at all grades. This new curriculum required the development of End of Grade tests, since the tests are linked directly to curriculum objectives. The new tests were used for the first time in 2005-06. An example may clarify this: algebra concepts and skills were pushed down into lower grades, simultaneously opening up more teaching room for additional concepts in Algebra I and II, and increasing the rigor of lower grades mathematics curricula. The effects of this policy shift may be seen in the outcomes for mathematics in grades 3 through 8. It is interesting to observe that in 2005-06, when these new curricula were first tested, a much smaller percentage of students statewide and in WCPSS were able to perform at or above grade level than had previously been true. During 2006-07, however, a rebound has been seen, especially with minority sub-groups, where larger gains were made, in terms of students at/above grade level, than was true for White and Asian students.

Simultaneously, the State Board of Education raised the “cut scores” for achievement levels. That is, a higher score was required to meet the “at grade level” standard. Thus, instead of about 85% of students passing each of the grade level mathematics EOG tests, the new standard led to a percent passing of about 65%. In WCPSS, about 75% of students at all grade levels passed the mathematics EOG tests, as opposed to the 90% that had been passing in the years between 2003 to 2005. In terms of the percentage of students scoring at proficient levels, the new standards increased the overall percentage of our students who scored below grade level to 26%, while creating larger achievement gaps by ethnicity, income, special education status, and English proficiency than we have seen in many years.

One consequence of the setting of new cut scores for mathematics in 2005-06 was that many schools failed to meet the AYP target required by No Child Left Behind. When the State Board set the new cut scores, they knew that only about 65% of students would achieve passing scores. Thus, many schools, by policy action, would fail to achieve the AYP target of 81% passing. To ameliorate this situation, the State Board requested authorization to revise its AYP goal for 2005-06 to 65.8%. While this adjustment offered short-term relief for schools, it did nothing to help in the long-term. The federal goal of 100% of students at grade-level in 2014 remains unchanged. Schools will have to accelerate the passing rates in the years between now and 2014 in order to achieve the federal goal. Even with the improvements seen in 2006-07 in percent of students passing mathematics tests, it seems unlikely that the rate of improvement will meet the 2014 goal of 100% of students performing at/above grade level.

This raising of the standard for passing EOG and EOC tests may be expected to continue into the future. In 2006-2007, new standards have been instituted for EOC tests in English I and all high school mathematics tests. Similarly, in 2007-08, a new series of reading EOG tests will be utilized and new science standards at all grade levels will be set. It can be anticipated that the relatively high levels of student test scores that have become traditional in Wake County Public Schools will decline, at least temporarily.

These new cut scores for EOC tests are important for another reason. The State Board of Education adopted rules in 2005 that require all students who entered high school during the 2005-2006 school year to pass five EOC tests—English I, Algebra I, biology, U.S. history and civics and economics—as a condition of graduation. In the past, students were required to pass these *courses* in order to graduate and teachers were required to count the EOC test score as 25% of the final course grade. Now, however, students will be required to pass the test *and* the course (which will continue to include 25% based on the EOC test score). Examination of the test scores for these courses in 2005-2006 indicated that this new requirement resulted in a number of students having to re-take the EOC test and having to re-take the course. It is highly possible that the consequences of this new rule by the State Board will include a likely increase (if only temporarily) of the drop-out rate, as students become discouraged by their apparent inability to pass the tests and an increase in the cost of educating at least some students, since students who do not pass the tests may be required to take the course again. In 2006-07, we have already seen the number of students retained in all high school grades increase.

Three measures have been taken to help students deal with these new challenges. First, WCPSS has taken advantage of a rule created by DPI that has not been previously used in WCPSS. Because all test scores are estimates of a student's competence, and the amount of error can be estimated, it is standard practice in high stakes tests like these to add points equal to the standard error of measurement. Thus, students who score at the top of the Level II score range (not at grade level) have two points added to their score, sometimes placing the score in the acceptable range. Second, schools have set up review/remediation programs to help students who have passed the associated course to prepare for a re-test opportunity. Finally, all high schools have carefully re-examined their course-taking practices and course scheduling. Since three of the five EOC courses needed for graduation are often taken in the freshman year (Algebra 1, English 1, and biology), many schools are counseling students to spread these courses out over three or four semesters, rather than trying to undertake these three in the two freshman semesters.

While all of these innovations will reduce the impact of these higher standards to some extent, it is unlikely that they will, by themselves, overcome the effect. Therefore, schools must find additional means to help students prepare for these EOC courses. It may also be seen from examination of the disaggregated test scores that students with various academic risk factors are more likely to be impacted negatively by these policy changes than are students who do not present these same risks. In addition, Black/African American students are more likely to score relatively low on these EOC tests and thus are more likely to fail to achieve the needed higher score, thus increasing the likelihood that drop-outs among these sub-groups will increase. The widespread use of a system of formative assessments in several high school subjects—especially the five mandatory courses—may help ameliorate this situation by providing information to students and teachers early in the course.

Another important change instituted by the State Board of Education is a revision of the methods for calculating expected and high growth as part of the ABCs of Education, the state accountability program. In the past, the goal of the ABCs was to ensure that every student achieved one year of academic growth for one year of school participation. Beginning in 2005-06, however, this goal was redefined. Now, every student will be expected to make progress relative to his/her position in comparison with students in the norming distribution, i.e., the year that the test is first administered. In other words, instead of an absolute standard of growth (one year of growth for one year of attendance) the standard is now relative, where the student's position is expected to, minimally, remain the same relative to other students. This represents a major departure from a criterion-based to a norm-based system.

The formula for calculating high growth has also been changed. In the past, high growth was calculated as about 10% more than expected growth. Now, in order to achieve high growth, 60% of students in a school must meet or exceed their predicted growth score. It can be expected that fewer schools will attain high growth in the future, although it is also likely that more students will attain expected or high growth. The net effect will be that while absolute measures (percent of students on grade level) may not be helped by these policy changes, the percent of students attaining growth may actually go up.

These changes in methods of calculating and reporting student achievement may divert attention from another phenomenon that has been witnessed in WCPSS over the past few years. While it has been noted in many places that the number of students served by WCPSS schools has been increasing dramatically over the past several years, it has been less commonly observed that these increases have not been uniform across all student subgroups. That is, in 2006-07, the percentage of students in the population who were White has declined since 2000-2001. Simultaneously, the percentages of students who are Hispanic/Latino, multi-racial, and Black/African American has increased. Moreover, the percentages of students in categories often identified with academic risk factors—students who qualify for free or reduced-price meals and students with limited English—have increased. While the percentage of students who are identified with disabilities has remained more or less constant, the sheer number of such students has increased the pressures confronted by schools who attempt to maximize the success of every student.

One of the implications of this shift in demographics is that schools will have to work harder and smarter to ensure that all students have the opportunity and the support that they will need to meet at or above grade level standards. Schools in WCPSS have historically been able to meet these challenges. Examination of percentages of students achieving grade level or above in reading, for example, show that, over time, the achievement gap associated with different racial/ethnic subgroups has been shrinking in WCPSS. For example, between 1999-2000 and 2006-07, the difference between the percent of Black/African American students in grades 3-8 who were proficient in reading and the percent of White students in the same grades who were proficient has shrunk by about 15 percentage points. Importantly, larger percentages of both groups were proficient in reading in 2006-07 than in 1999-2000. Thus, all ethnic/racial groups were successful at increasing the percentage on/above grade level during this period.

Similarly, students who qualify for free or reduced-price meals or who are students with disabilities, or who are students of limited English proficiency taken as separate groups tend to perform better on all measures of achievement than do students who have more than one of these characteristics. The number of students with these combinations of academic risk factors is increasing in WCPSS and so the challenges confronting schools is increasing. Finally, it should be noted that female students, as a group, are more likely to be successful on most measures of achievement than are male students in elementary and middle schools. However, this trend reverses in high schools, with male students, as a group, outscoring female students, as a group, on many high school measures of achievement. Importantly, this reversal is completed by the time that students take SAT tests, with the result that male students outscore female students on average on both the verbal and mathematics sections of the SAT. This fact, of course, has important implications for college attendance and financial aid, since many university admissions committees and scholarship donors take SAT scores into account when making their decisions.

Another challenge illuminated by this analysis of student achievement lies in the area of teaching and learning of writing. By our own measures and by those used by the state, as many as 40% of our students fail to demonstrate proficient levels of writing when content and conventions are considered. While the state writing test measures students' responses to just one prompt on one day with one set of standards, results have been consistent enough to suggest that we must search for ways to help more students accomplish proficiency in their writing. It should also be noted that the Blue Ribbon Commission that is advising the State Board of Education on testing issues has suggested eliminating the writing tests until more reliable scoring methods can be established.

Both the changes in the mathematics standards and our writing results had a direct impact on our accountability results this year for our state ABCs results. New growth formulas resulted in more elementary schools meeting expected growth rather than high growth in 2006-07. Fewer schools were able to reach the higher recognition levels based on ABCs, because performance composites (based on the percentage of scores at grade level) were lower in mathematics and writing scores were also included (after a two year absence), although 2006-07 saw improvements as compared with the year before. This pattern is likely to be present each time a new test is given and normed, because it is the reference year against which future scores will be compared.

The Superintendent of the Wake County Public Schools has articulated a vision calling for all students to graduate on time prepared for the future. In support of this vision, the first strategic directive in the Superintendent's goals stresses learning and teaching. A number of important program responses to this call for improved teaching and learning have been reinforced or are being launched. Many schools in the district are supporting professional learning communities, a structure that can provide ways for teachers to collaborate more fully around the needs of their students. Project Achieve has been a successful model in increasing grade level proficiency, and formative assessments and other methods used as part of that program are being shared with schools that did not make AYP. Data teams are being encouraged in all schools to utilize data more effectively to inform instruction. The creation of formative tests for high school courses has already been described. Evaluation and Research Department staff have carried out two studies to identify effective practices for teaching multi-risk students and a number of subject-specific studies in high schools.

But, in a larger sense, teaching and learning are impacted by all staff of WCPSS, by all parents, and by the entire community. While this report has focused on the outcome measures of student achievement, and this discussion has attempted to underscore some of the conditions that confront our schools, teachers, and students, the assistance of all those whose work supports student learning—whether support staff in schools or the district, parents, or community members—will be required to ensure that our students continue to learn at ever higher levels.

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WCPSS ELEMENTARY SCHOOL STUDENT OUTCOMES 2006-07

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