

**2006-07**



**WAKE COUNTY**  
PUBLIC SCHOOL SYSTEM

**WCPSS ELEMENTARY SCHOOL STUDENT OUTCOMES**  
**2005-06**

**Editors**

Nancy Baenen  
David Holdzkom

**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 2005-06

### EXECUTIVE SUMMARY

This report summarizes overall trends in student outcomes for 2005-06 and over time for the Wake County Public School System (WCPSS). This includes not only a variety of testing results but accountability standards, promotion/retention, and suspension 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 24% 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, plus the statewide End-of-Grade (EOG) tests, writing assessment (grade 4), and the IDEA Proficiency Test (IPT) for students with limited English proficiency.

***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.

On K-5 assessments, more than 80% of students in grades K, 1, and 2 demonstrated desired reading skills by spring of 2006. Differences were evident by subgroup, with limited LEP students, Hispanic/Latino, students with disabilities (SWD), and students eligible for free or reduced-price lunch (FRL) having lower percentages of students reaching book level standards than students without these academic risk characteristics.

Most students in grades 2-5 (73%) scored proficient on reading strands, but lower percentages performed at or above grade level on expository and narrative assessments (58%), which tap both reading and writing skills. Results for these assessments are lower than for the EOG reading test.

Slightly more than half (54%) of the students in grades 3-5 scored proficient in writing conventions, with two thirds (67%) showing mastery of writing content based on a writing collection. Grade 4 performance on the state writing test was in the same range, with 59% scoring proficient.

**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 2005-06). 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 2005-06 was still about 14 to 18 percentage points.
- The percentage of females who scored proficient was higher than for males.
- 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 2005-06, 59% of WCPSS students in grade 4 scored proficient versus 50% 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 above 60% in 2005-06. The lowest proficiency rates in 2005-06 were found among the FRL, SWD, Black/African American, and Hispanic/Latino subgroups, all of whom had rates lower than 50%. Female students (66% proficient) outperformed Males (53% proficient) at grade 4.

**Proficiency Test: IDEA** On the IPT, LEP students earn scores for reading, listening, writing, and speaking. Students were most likely to score at advanced or superior levels in listening (70%) and least likely to score at these levels in writing (24%). Students must score superior in all four sections of the test to exit LEP status, which is an extremely high standard that few students reach. Only 3% of students scored superior in writing in 2005-06.

## 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 new mathematics End-of-Grade tests used at grades 3-8 in 2005-06 brought more rigorous standards, lower overall proficiency, and larger gaps by ethnicity and academic risk groups.

- Across grades 3-8, results for 2005-06 show the math proficiency standard is more difficult to meet than the reading standard. In reading, 91% of students scored proficient, while 75% scored proficient in math.
- At grades 3-5, 76% of WCPSS students scored proficient in mathematics. Higher percentages of WCPSS students in grades 3-5 scored at grade level than was true statewide (66%).
- By ethnicity, the percent proficient ranged from 52% to 92%, much wider than was true with the old test and standards. The gap between White and Black/African American students, for example, was 37 percentage points in math in 2005-06. 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.

## 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 2005-06 school year, 96% of WCPSS' students K-12 were promoted, while 4% (4,876 students) were retained.
- The highest percentage of students was retained at grade 9 (15%), followed by grade 10 (9%). Kindergarten, grade 1, and grade 11 had the next highest retention rates, at about 5%.
- Students in all No Child Left Behind subgroups (ethnicity, FRL, SWD, and LEP) in WCPSS are promoted at a high rate, ranging from 91% to 98%. LEP students had the highest rate of retention (9%).

## ABCs Results

At the elementary school level, most schools met growth standards (77%) with the new formula, a drop of only 7% from 2004-05. However, a considerably lower percentage of schools achieved high growth (16%) in 2005-06 as compared to 2004-05 (37%).

In terms of ABCs recognitions, fewer elementary schools received the highest recognitions, because of the new formulas for growth, the inclusion of writing, and more rigorous math standards.

- Only 8 of 88 elementary schools (9%) in WCPSS were able to reach the highest standard of Honor School of Excellence or School of Excellence with the new higher standards, compared to 49 of 84 schools (58%) in 2004-05.

- The most common recognition in 2005-06 was School of Distinction (31 schools) or School of Progress (29 schools).

### **AYP Results**

Federal AYP standards associated with NCLB also became more difficult to meet in 2005-06 with the change in math level scores.

- Overall, 53% of WCPSS elementary schools met AYP by meeting all of their targets, compared to 80% in 2004-05.
- Math targets were missed more often than reading targets for the first time. Targets were most likely to be missed for the SWD and FRL groups.
- Schools with fewer targets were more likely to meet AYP standards. All elementary schools with 15 or fewer targets met AYP.
- Across the elementary, middle, and high school levels, despite meeting over 90% of the targets (71 of 76), WCPSS entered systemwide improvement. This was because reading targets were missed in all of three levels (3-5, 6-8, and 10) for two consecutive years (2004-2005 and 2005-2006). A systemwide plan for improvement will be implemented.

## WCPSS ELEMENTARY SCHOOL STUDENT OUTCOMES 2005-06

### INTRODUCTION AND DEMOGRAPHIC TRENDS

#### INTRODUCTION

The purpose of this report is to provide those interested in elementary school outcomes with all the data we have 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 differs from those written in the past, when Wake County Public School System's (WCPSS) Evaluation and Research Department (E&R) has 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, to help contextualize student outcomes.
- Testing outcomes, which are organized by subject—literacy and math. Results for some assessments have not been published in recent years (Kindergarten Initial Assessment, Writing Results, Idea Proficiency Test, and Cognitive Abilities Test). Other student outcomes, including retention and suspension data, are also provided.
- Accountability outcomes, including school performance on state ABCs of Public Education and federal Adequate Yearly Progress (AYP) standards.
- Findings related to effective practices from E&R studies, to provide ideas on what may or may not be helpful to students.

#### Decision Rules

Across the various sections of the report, the data presented represent all students in the school system with a few exceptions. Results from state-mandated tests in this report (End-of-Grade Tests and the Writing Test) are based only on students able to take the standard version of those assessments. Any exceptions to this general rule are explained within the relevant sections. Results for small numbers of students who take alternate or alternative tests in lieu of those standard assessments are not included, as they are being reported in an upcoming report on alternate assessments. These students are primarily those with moderate to severe disabilities and/or with limited English proficiency, and are relatively small in number, usually less than 5% of the student population. Therefore, the results in the End-of-Grade 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 bar graphs, if a number is shown inside a bar or on top of a bar, it reflects the number of students actually shown in the bar (the numerator in a division problem). If counts are shown in footnotes or labels at the bottom of graphs, they represent the total number of students in that particular group considered for the analysis (the denominator).

## Ways to Use This Report

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

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

A volume this large and comprehensive could not possibly have been produced without the efforts of many people. Evaluation and Research Department staff who contributed to this report included Nancy Baenen, David Holdzkom, Wanda Whisnant, Kimberly Yaman, Wendy Stevens, Anne-Sylvie Boykin, Donna Eaton, Kevin Gilleland, Glenda Haynie, Anisa Rhea, Phyllis Spencer, Megan Townsend, Amy Huebeler, Sarah Ives, Brad McMillen, Juliana Muli, Colleen Paepflow, Edie Pierce, Rosemary Reichstetter, and Carol Speas. Their contributions and feedback were invaluable in the development of this report.

## DEMOGRAPHIC TRENDS

In this section we describe the nature of the student's served in WCPSS, along with changes over time, as context for the student's outcomes data that follow. To make the demographic and outcome data as parallel as possible, we used student characteristics information reported in May 2006 by the WCPSS Student Information locator program and combined it with test and other status information from E&R July end-of-year summary files (as provided to the Department of Public Instruction). Thus, these figures will not necessarily match official 20<sup>th</sup>-day fall enrollments. For a few tables and figured that compared enrollment over time, only the May locators were used, so counts are slightly different. These are noted as appropriate.

### 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 23,500 new students have entered WCPSS schools since 2001, a 24% 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.

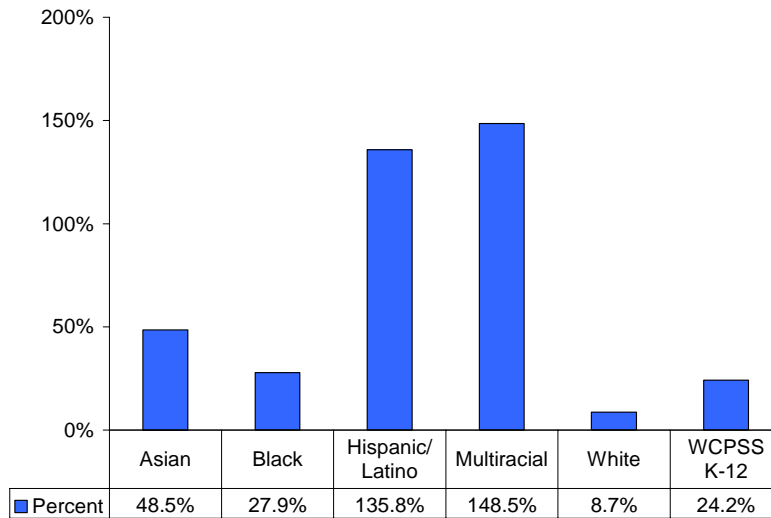
**Table 1**  
**Students by Ethnicity, Spring 2001-06, Grades K-12**

	2001	2002	2003	2004	2005	2006	Net Increase
<b>American Indian</b>	271	266	270	293	306	326	55
<b>Asian</b>	3,925	4,180	4,483	4,694	5,108	5,830	1,905
<b>Black/African American</b>	25,493	26,473	27,778	29,307	30,684	32,609	7,116
<b>Hispanic/Latino</b>	4,855	5,877	6,978	8,197	9,676	11,447	6,592
<b>Multiracial</b>	1,732	2,157	2,583	3,159	3,682	4,304	2,572
<b>White</b>	61,246	61,959	62,372	63,062	64,478	66,598	5,352
<b>All WCPSS K-12</b>	97,522	100,912	104,464	108,712	113,934	121,114	23,592

Data Source: Analysis of WCPSS Student Locator annual May data

The following figure shows the percentage increase by ethnic group in spring 2006 compared to spring 2001; the Multiracial and Hispanic/Latino student groups more than doubled.

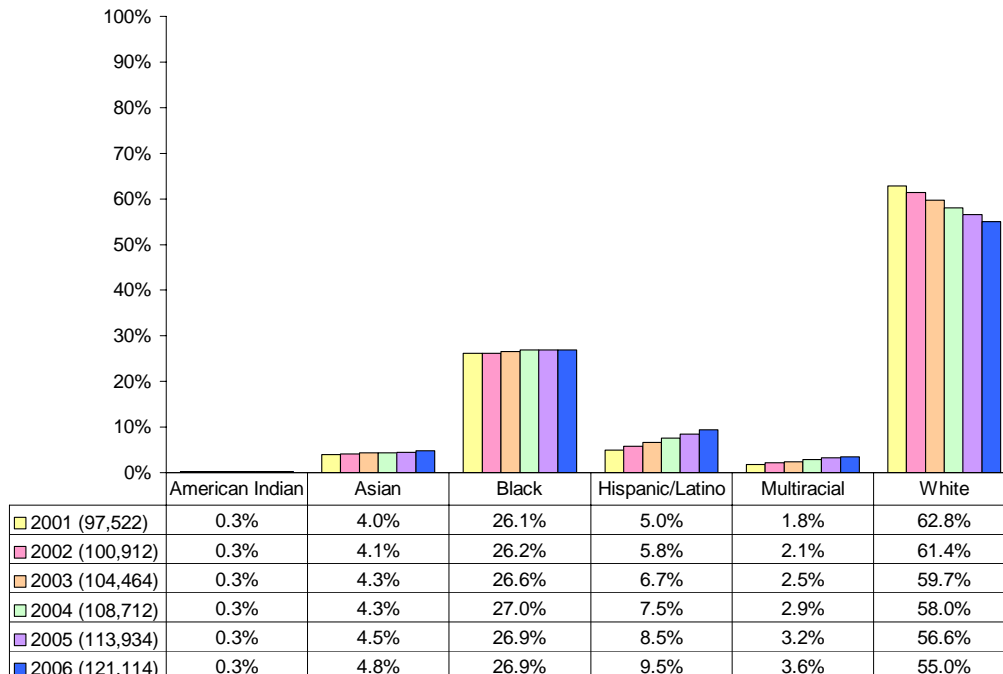
**Figure 1**  
**Increase in Membership by Ethnicity, Spring 2001-06, Grades K-12**



Data Source: Analysis of WCPSS Student Locator annual May data  
 Note: Numbers of students shown in previous table.

Figure 2 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 2**  
**Student Population by Ethnicity, Spring 2001-06, Grades K-12**



***By Academic Risk Factor (K-12)***

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

Enrollments increased for all risk subgroups between spring of 2001 and 2006, 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.

**Table 2**  
**Students by Risk Factor, Spring 2001-06, Grades K-12**

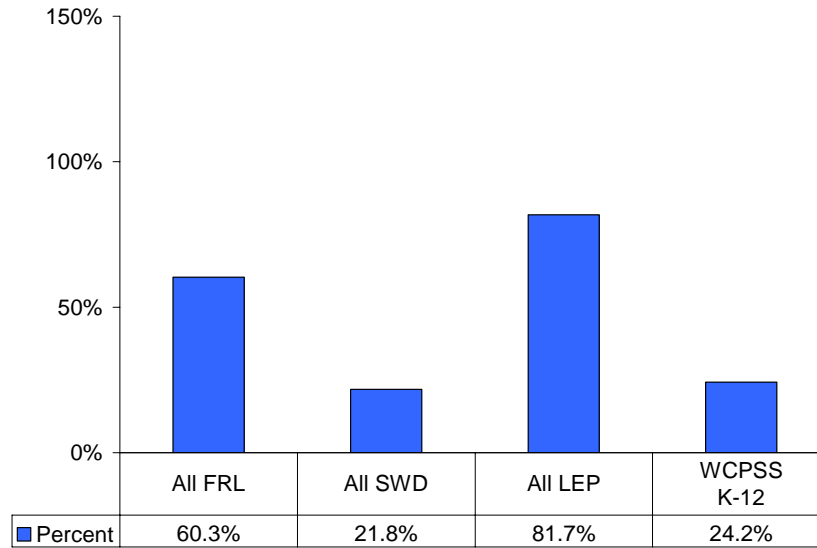
	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>All FRL</b>	21,959	24,172	25,782	28,428	30,881	35,195
<b>All SWD</b>	14,179	14,483	14,948	16,025	16,630	17,264
<b>All LEP</b>	4,398	5,451	6,610	5,659	6,371	7,989
<b>FRL and LEP</b>	2,686	3,455	4,157	3,801	3,982	5,429
<b>FRL and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

Data Source: Analysis of WCPSS Student Locator annual May data

Note: Students can be counted more than once in the top section of this table (duplicated count). Students are counted only once on the bottom part of the table (unduplicated count).

The following figure shows that, when the number within each risk group in spring 2006 is compared to spring 2001, the percentage of LEP and FRL students increased considerably more than the system overall. The number of LEP students came close to doubling, with an increase of 60% for FRL students. While the number of SWD students increased, WCPSS students who are SWD remained constant as a percentage of the district population overall. Students with more than one academic risk characteristic, while relatively small in numbers, also increased more than the system increase in population overall (not shown).

**Figure 3**  
**Increase in Membership by Risk Factor, Spring 2001-06, Grades K-12**

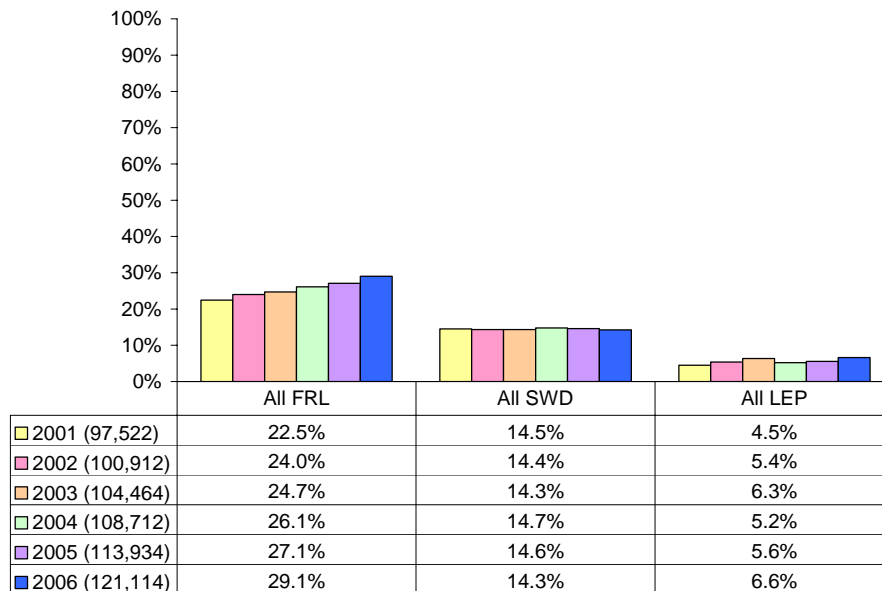


N = 121,114

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 4). The biggest impact of these changes has been an increase in the percentage of FRL students in WCPSS.

**Figure 4**  
**Student Population by Risk Factor, Spring 2001-06, Grades K-12**



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

Table 3 shows gender patterns within academic risk groups by ethnicity. The primary differences are within SWD groups, where the number of males is approximately double that of females in almost every comparison where SWD is involved.

**Table 3**  
**Students with Academic Risk Factors by Gender by Ethnicity, Spring 2006, Grades K-12**

		Am Indian	Asian	Black	Hispanic/ Latino	Multi- Racial	White	Total
<b>FRL</b>	Female	50	474	9,780	3,985	721	2,410	17,420
	Male	46	424	9,469	4,226	683	2,520	17,368
	Total	96	898	19,249	8,211	1,404	4,930	34,788
<b>SWD</b>	Female	19	89	2,200	425	181	2,616	5,530
	Male	33	145	4,272	841	400	5,852	11,543
	Total	52	234	6,472	1,266	581	8,468	17,073
<b>LEP</b>	Female	2	498	255	2,968	46	227	3,996
	Male	3	562	248	3,125	58	272	4,268
	Total	5	1,060	503	6,093	104	499	8,264
<b>FRL-SWD</b>	Female	6	17	1,631	117	95	376	2,242
	Male	14	17	3,053	268	172	785	4,309
	Total	20	34	4,684	385	267	1,161	6,551
<b>FRL-LEP</b>	Female	1	169	200	2,315	22	87	2,794
	Male	1	165	178	2,262	23	84	2,713
	Total	2	334	378	4,577	45	171	5,507
<b>SWD-LEP</b>	Female	0	7	1	35	4	9	56
	Male	0	17	4	50	5	19	95
	Total	0	24	5	85	9	28	151
<b>FRL-SWD-LEP</b>	Female	0	12	14	193	2	8	229
	Male	0	11	26	375	4	9	425
	Total	0	23	40	568	6	17	654

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary. Different dates of files resulted in slightly different counts than May locator alone. (See Table 4)

Note: Duplicated count top section; unduplicated bottom section.

**Elementary Enrollment Trends over Time**

*By Ethnicity (Grades K-5)*

Elementary growth patterns are similar to those for K-12 overall. As the following table shows, numbers of elementary students increased for all ethnic groups between spring 2001 and spring 2006. 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.

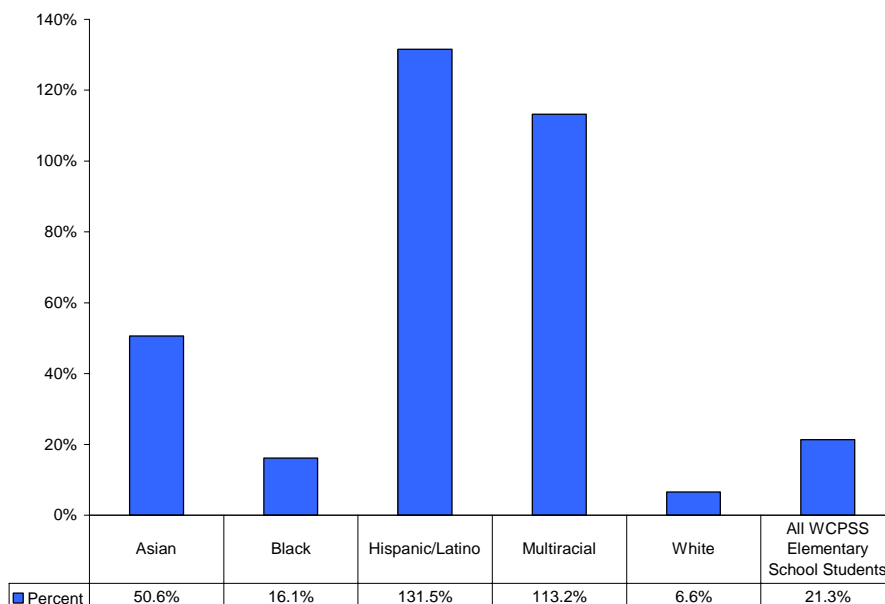
**Table 4**  
**Students by Ethnicity, Spring 2001-06, Grades K-5**

	2001	2002	2003	2004	2005	2006	Net Increase
<b>American Indian</b>	158	147	143	144	146	166	8
<b>Asian</b>	2,029	2,164	2,290	2,409	2,622	3,056	1,027
<b>Black/African American</b>	13,202	13,266	13,528	13,962	14,477	15,330	2,128
<b>Hispanic/Latino</b>	3,010	3,705	4,400	5,079	5,994	6,967	3,957
<b>Multiracial</b>	1,241	1,485	1,704	2,013	2,296	2,646	1,405
<b>White</b>	29,624	29,389	29,110	29,400	30,290	31,588	1,964
<b>All WCPSS Elementary</b>	<b>49,264</b>	<b>50,156</b>	<b>51,175</b>	<b>53,007</b>	<b>55,825</b>	<b>59,753</b>	<b>10,489</b>

Data Source: Analysis of WCPSS Student Locator annual May data

The following figure shows the percentage increase of each ethnicity in spring 2006 compared to spring 2001 with the Hispanic/Latino population more than doubling (132%), increasing from 3,010 in May 2001 to 6,967 in May 2006.

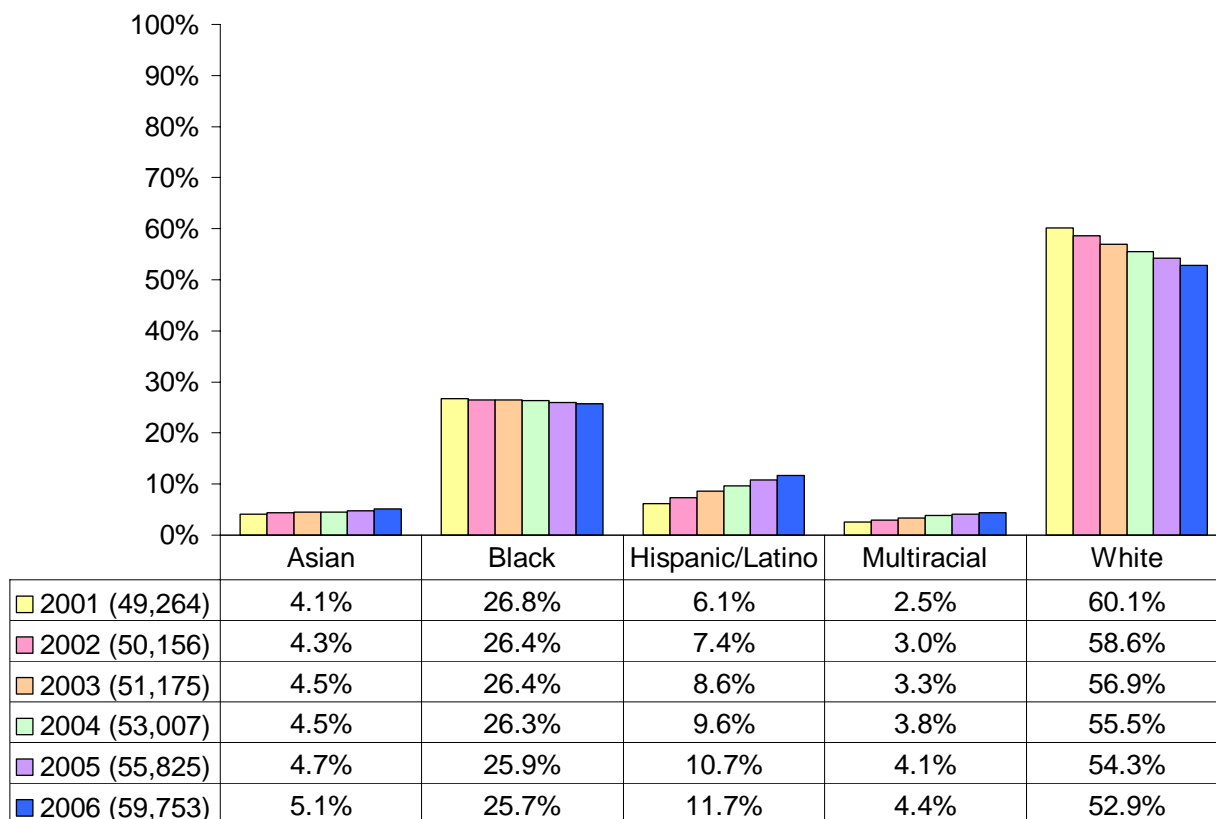
**Figure 5**  
**Increase in Membership by Ethnicity, Spring 2001-06, Grades K-5**



Note: Counts shown in Table 5.

While Figure 5 shows that all ethnicities have increased, Figure 6 indicates a growing percentage of Hispanic/Latino, Multiracial, and Asian students in WCPSS. With these three groups growing at a faster pace, Black/African American and especially White students represent decreasing percentages of the overall membership. Moreover, Hispanic/Latino students represent a larger percentage of elementary school students than was true previously.

**Figure 6**  
**Student Population by Ethnicity, Spring 2001-06, Grades K-5**



Data Source: Analysis of WCPSS Student Locator annual May data

**By Academic Risk Factor (Grades K-5)**

More than 10,000 additional students have entered WCPSS elementary schools since 2001, a 21% increase. The following table 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 risk factors. In each year, FRL students outnumbered students with other risk factors, followed by those students with the SWD academic risk factor.

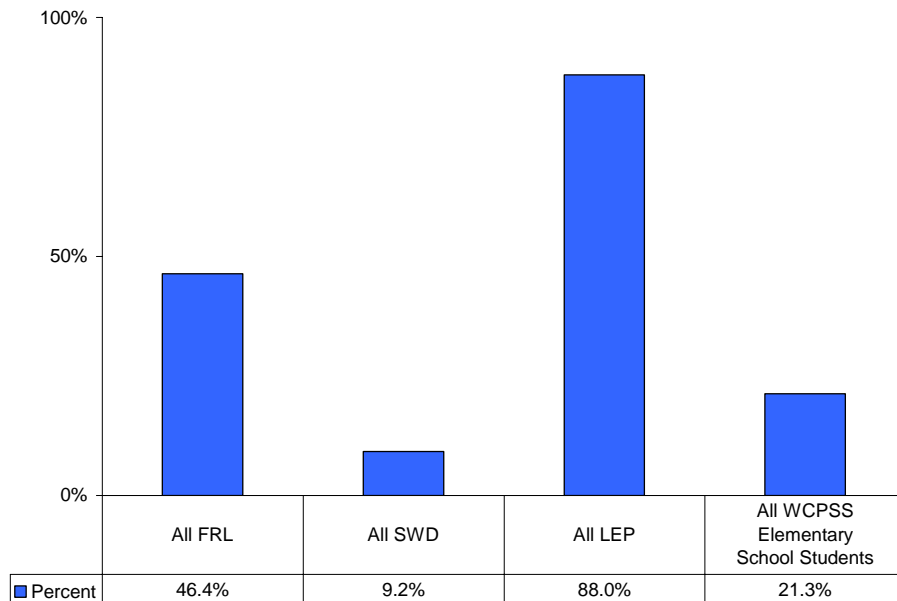
**Table 5**  
**Increase in Students by Academic Risk Factor, Spring 2001-06, Grades K-5**

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

Source: Analysis of WCPSS Student Locator annual May data

Although the LEP student percentage of growth was uneven over the period, the following figure shows the LEP category increased the most overall, at 88% (from 2,884 in May 2001 to 5,421 in May 2006).

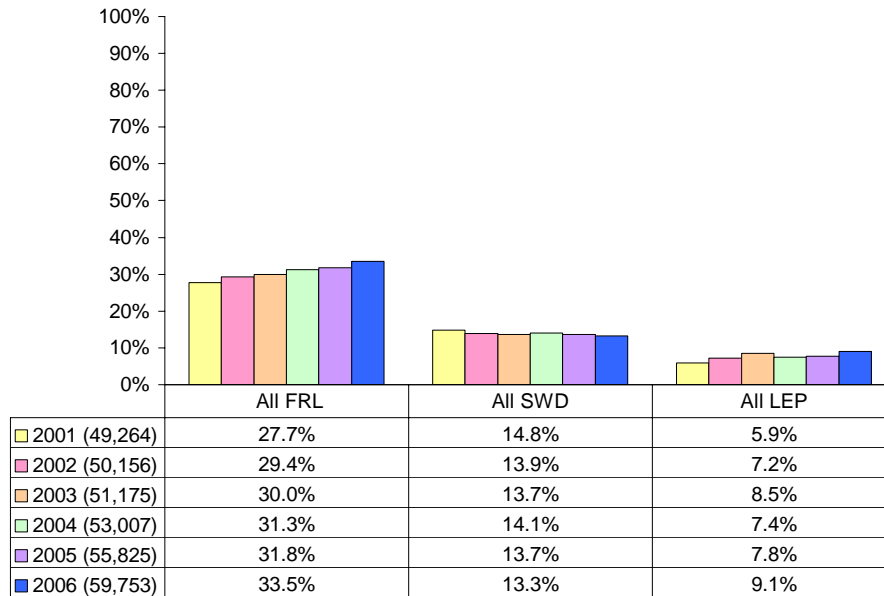
**Figure 7**  
**Percent Increase in Membership by Academic Risk Factor, Spring 2001-06 Comparison, Grades K-5**



Note: Number of students 15 is shown in Table 5  
 Source: Analysis of WCPSS Student Locator annual May data

The following figure 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 8**  
**Percentage of Student Population by Academic Risk Factor, Spring 2001-06, Grades K-5**



Source: Analysis of WCPSS Student Locator annual May data

It should be noted that even though the numbers of elementary school students in multiple academic risk categories are small as indicated in Table 5 above, the percentage of these students increased greatly from 2001 to 2006:

- FRL and LEP: 103%.
- FRL and SWD: 22%.
- LEP and SWD: 51%.
- FRL, LEP, and SWD: 154%.

The following table shows the percentage of students at the elementary level by gender over different academic risk categories. Of note, the data indicates approximately a doubling of males over females in almost every risk factor where SWD was involved, a number not evident in the other academic risk factors.

**Table 6**  
**Students with Risk Factors by Gender and Ethnicity, Grades K-5, Spring 2006**

		Amer. Indian	Asian	Black	Hispanic/ Latino	Multi- Racial	White	Total
<b>FRL</b>	Female	28	254	5,029	2,705	486	1,376	<b>9,878</b>
	Male	32	217	5,013	2,791	479	1,454	<b>9,986</b>
	<b>FRL Total</b>	<b>60</b>	<b>471</b>	<b>10,042</b>	<b>5,496</b>	<b>965</b>	<b>2,830</b>	<b>19,864</b>
<b>SWD</b>	Female	7	49	884	232	110	1,170	<b>2,452</b>
	Male	17	82	1,887	492	237	2,755	<b>5,470</b>
	<b>SWD Total</b>	<b>24</b>	<b>131</b>	<b>2,771</b>	<b>724</b>	<b>347</b>	<b>3,925</b>	<b>7,922</b>
<b>LEP</b>	Female	2	328	121	2,085	34	148	<b>2,718</b>
	Male	2	354	123	2,130	48	184	<b>2,841</b>
	<b>LEP Total</b>	<b>4</b>	<b>682</b>	<b>244</b>	<b>4,215</b>	<b>82</b>	<b>332</b>	<b>5,559</b>
<b>FRL-SWD</b>	Female	4	10	705	56	63	195	<b>1,033</b>
	Male	10	9	1,418	147	112	419	<b>2,115</b>
	<b>Total</b>	<b>14</b>	<b>19</b>	<b>2,123</b>	<b>203</b>	<b>175</b>	<b>614</b>	<b>3,148</b>
<b>FRL-LEP</b>	Female	1	96	94	1,697	17	55	<b>1,960</b>
	Male	1	87	86	1,621	20	54	<b>1,869</b>
	<b>Total</b>	<b>2</b>	<b>183</b>	<b>180</b>	<b>3,318</b>	<b>37</b>	<b>109</b>	<b>3,829</b>
<b>SWD-LEP</b>	Female	0	6	1	15	2	5	<b>29</b>
	Male	0	13	2	26	3	12	<b>56</b>
	<b>Total</b>	<b>0</b>	<b>19</b>	<b>3</b>	<b>41</b>	<b>5</b>	<b>17</b>	<b>85</b>
<b>FRL-SWD-LEP</b>	Female	0	6	6	134	1	5	<b>152</b>
	Male	0	4	19	259	4	5	<b>291</b>
	<b>Total</b>	<b>0</b>	<b>10</b>	<b>25</b>	<b>393</b>	<b>5</b>	<b>10</b>	<b>443</b>

Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary. Counts do not match those based on Student Locator, because of record updates.

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

### Free or Reduced-Price Lunch Students (FRL)

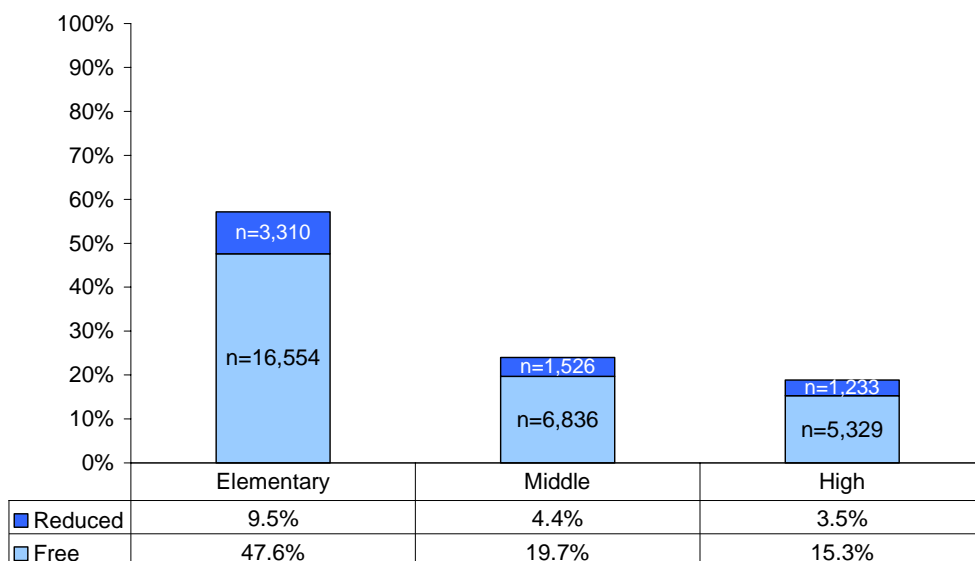
School systems are required to monitor the achievement of low-income students for various purposes, including The Elementary and Secondary Education Act of 1965, as amended by the No Child Left Behind Act of 2001 (NCLB) regulations. Currently, students' FRL status is used as an indicator of socio-economic 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 is that qualifying for FRL is not synonymous with meeting federal poverty level guidelines. To qualify, families must have an income at or below 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 \$24,420, while a family of five can earn \$43,290.
- 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.

Families have the opportunity to apply for FRL annually. In May 2006, there were 34,788 students enrolled in the FRL program. This represented approximately 29% of the 121,114 WCPSS students. Within each level, FRL students represent 33% of elementary, 30% of middle, and 20% of high school students enrolled.

Looked at in another way, within the FRL student populations, 57% were at the elementary level, 24% were at the middle school level, and 19% were at the high school level. The following figure also illustrates that most students who qualified at all three levels qualified for free lunch rather than reduced-price lunch.

**Figure 9**  
**Percentage of FRL Students by Level, Spring 2006**



n = 34,788

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

As shown in the following table, within each level, more than 80% of the students received free meals and fewer than 20% received reduced-price meals.

**Table 7**  
**FRL Trends by Level, Spring 2006**

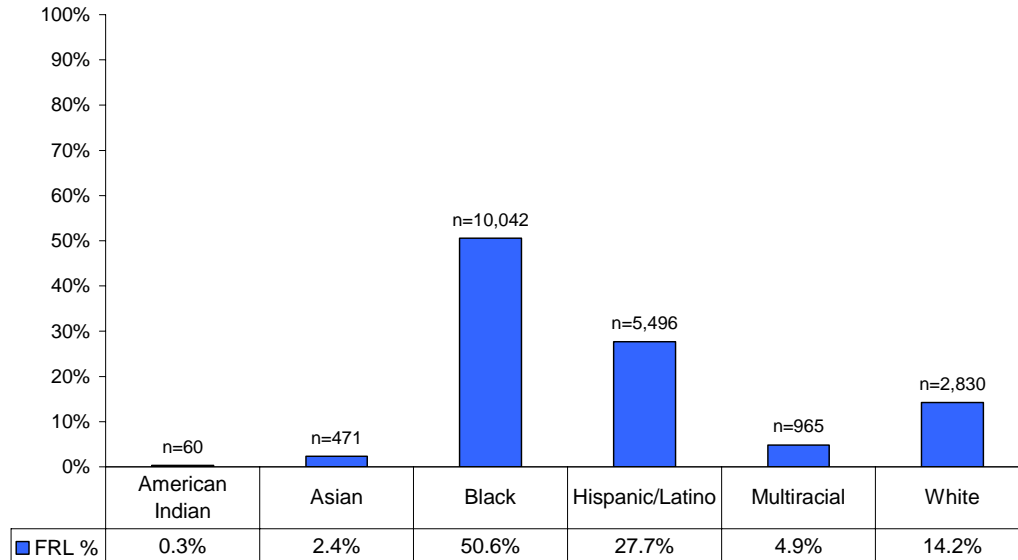
Level	Free	Reduced-Price	Total
Elementary	83.3%	16.7%	19,864
Middle	81.7%	18.3%	8,362
High	81.2%	18.8%	6,562
<b>Total</b>	<b>28,719</b>	<b>6,069</b>	<b>34,788</b>

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

The percentage of elementary FRL students is spread out fairly evenly by grade, with a slight decrease as the grades increase. Of the 19,864 elementary FRL students, 19% are in kindergarten and 15% are in 5th grade.

The following figure shows the percentage of FRL students from each ethnic group at the elementary level.

**Figure 10**  
**Percentage of FRL Students of Each Ethnic Subgroup, Spring 2006, Grades K-5**



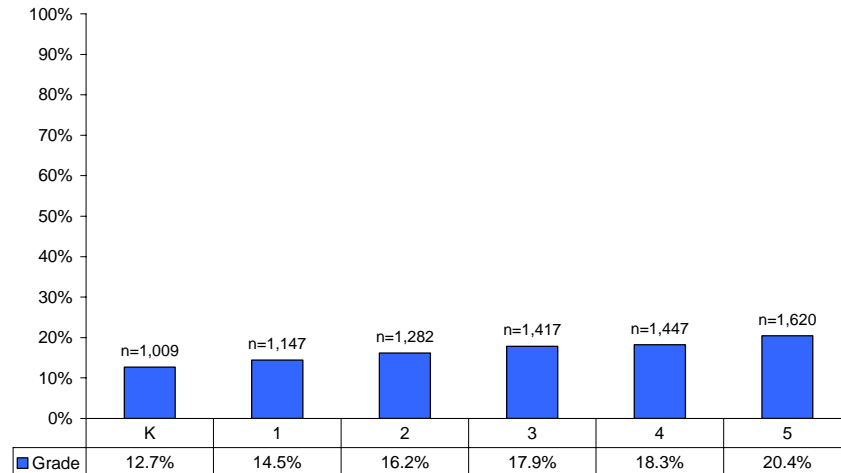
n = 19,864

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

**Students with Disabilities (SWD)**

The number of SWD students in grades K-12 was 17,073 as of May 2006. Of those, 7,922 students (46%) were enrolled in elementary school. The percentage of SWD students increased slightly across grades K through 5.

**Figure 11**  
**SWD Students, Spring 2006, Grades K-5**



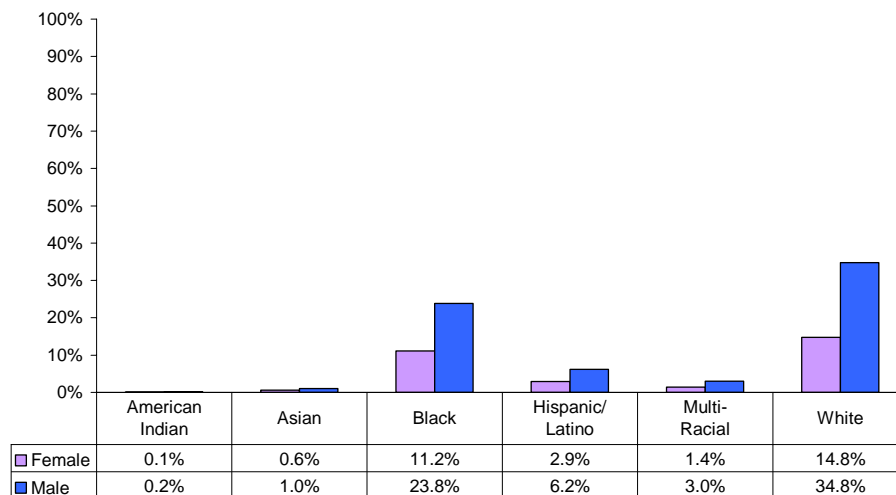
n = 7,922

Note: Numbers do not match those from the Student Locator alone, due to later updates.

Data Source: May 2006 (5/1/06). Student Locator merged into July 2006 End-of-Year Summary

As shown in Figure 12, the majority of SWD students at the elementary school level were White (50%) or Black/African American (35%). Males composed 69% of the SWD population.

**Figure 12**  
**SWD Students by Ethnicity and Gender, Spring 2006, Grades K-5**



n = 7,922

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

Although there are many classifications within the SWD status, most SWD students were classified as learning disabled (LD) or other health impaired (OHI).

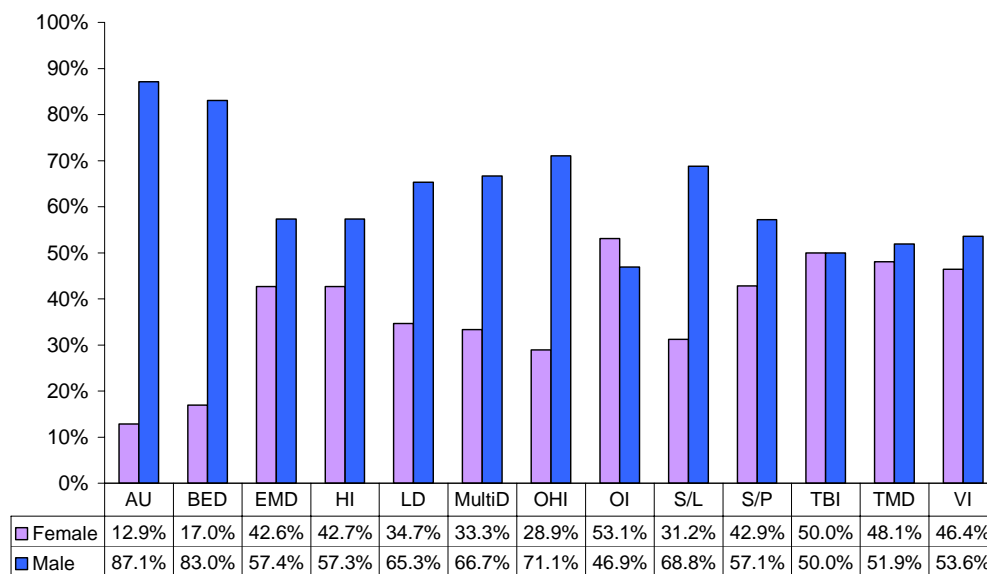
**Table 8**  
**Students by Disability, Spring 2006, Grades K-5**

Code	Name	Total Percentage of Elementary SWD Population	Number of Students
<b>AU</b>	Autistic	7.9%	552
<b>BED</b>	Behaviorally/Emotionally Disabled	3.2%	224
<b>EMD</b>	Educable Mentally Disabled	4.9%	340
<b>HI</b>	Hearing Impaired	1.3%	89
<b>LD</b>	Learning Disabled	38.7%	2,703
<b>Multi D</b>	Multi-Disabled	0.4%	27
<b>OHI</b>	Other Health Impaired	22.5%	1,573
<b>OI</b>	Orthopedically Impaired	0.5%	32
<b>S/L</b>	Speech/Language Impaired	18.6%	1,298
<b>S/P</b>	Severely/Profoundly Mentally Disabled	0.3%	21
<b>TBI</b>	Traumatic Brain Injured	0.2%	12
<b>TMD</b>	Trainable Mentally Disabled	1.1%	77
<b>VI</b>	Visually Impaired	0.4%	28

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary.  
n = 6,976. Category information was unavailable for other SWD students.

Males made up the majority of most SWD categories. In elementary school, males represented the vast majority of the autistic population (87%) and the behaviorally/emotionally disabled population (83%). Females represented a slightly higher percentage of the Orthopedically Impaired population (53%).

**Figure 13**  
**SWD Students by Gender and Disability**  
**Spring 2006, Grades K-5**



n = 6,978 students labeled with a specific learning disability; SWD category information was not available for 944 students.

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

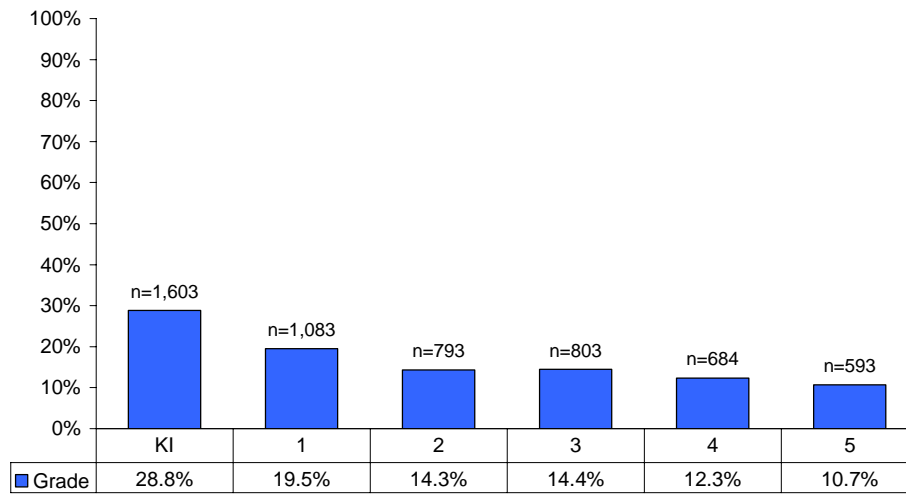
Note: See Table 8 for group sizes.

**Limited English-Proficient Students (LEP)**

In May 2006, 8,264 LEP students were enrolled in WCPSS across grades K-12. Of those, 5,559 students (67%) were enrolled in grades K-5.

In K-12, the LEP population decreased across grades K-12. Within the elementary level, the largest percentage of LEP students (29%) was enrolled in kindergarten in May 2006, see figure 14.

**Figure 14**  
**LEP Students by Grade, Spring 2006, Grades K-5**

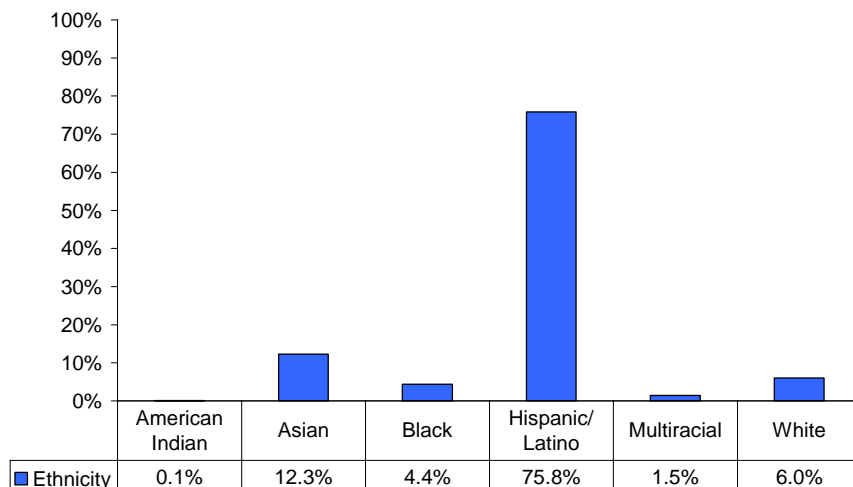


n = 5,559

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

While most LEP students were Hispanic/Latino (76% at elementary school) in May 2006, the LEP population represented a very diverse group with more than 90 different languages. Figure 15 represents the ethnic makeup of the LEP population at the elementary school level. The percentage of students who were male and female within each ethnicity was similar (within 1%).

**Figure 15**  
**LEP Students by Ethnicity, Spring 2006, Grades K-5**

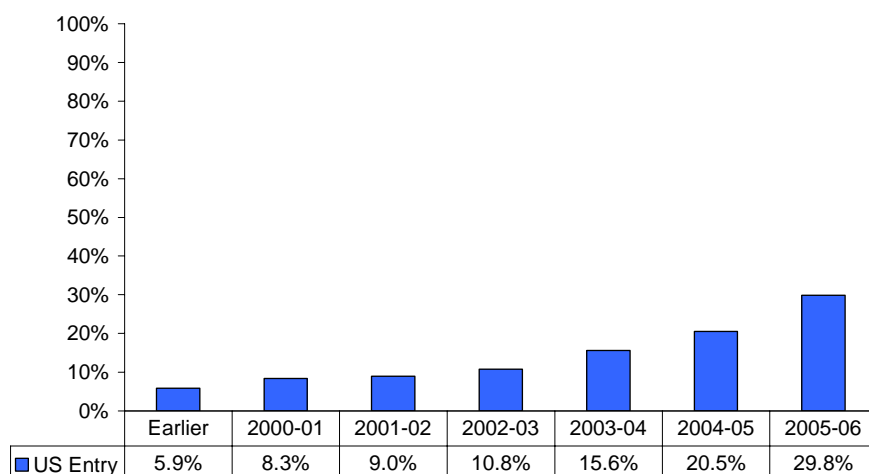


n = 5,559

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

Figure 16 illustrates the school year in which LEP students enrolled in WCPSS as of May 2006. The lesser percentages in earlier years can be attributed to the increasing numbers of LEP students entering the school system in recent years and to LEP students achieving English proficiency (and exiting LEP status). About half of the LEP students enrolled in May 2006 had been in WCPSS one to two years. Nearly one quarter (23%) of the current elementary school LEP population entered WCPSS four or more years ago and still had not achieved English proficiency in May 2006. Research states that it takes four to ten years to become proficient in academic English (Cummins, 1981; Thomas and Collier, 2002).

**Figure 16**  
**Entry of LEP Students, Spring 2006, Grades K-5**

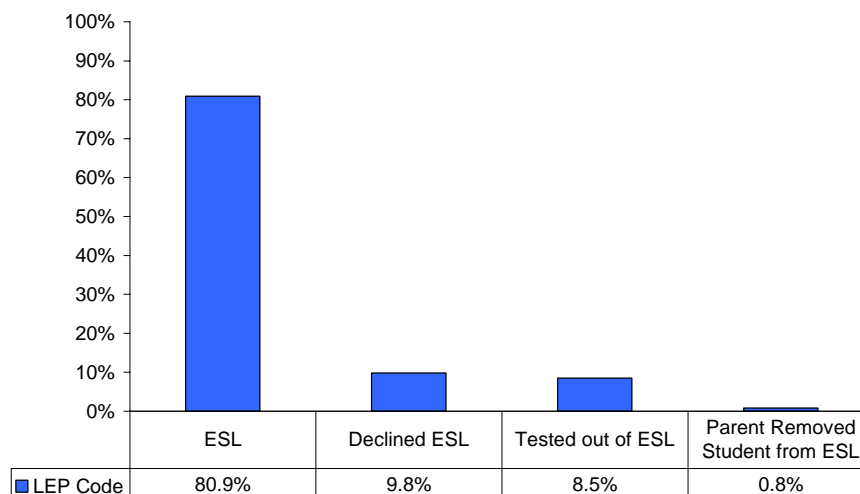


n = 4,005 students who had a WCPSS entry date

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

The following figure illustrates that the vast majority of LEP students in WCPSS in May 2006 were enrolled in English as a Second Language (ESL) services (81%). The parents of about 10% of eligible students declined service, and 9% of students scored high enough on the IDEA Proficiency Test (IPT) to test out of ESL (but not out of LEP status).

**Figure 17**  
**Status of LEP Students, Spring 2006, Grades K-5**



n = 5,393

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

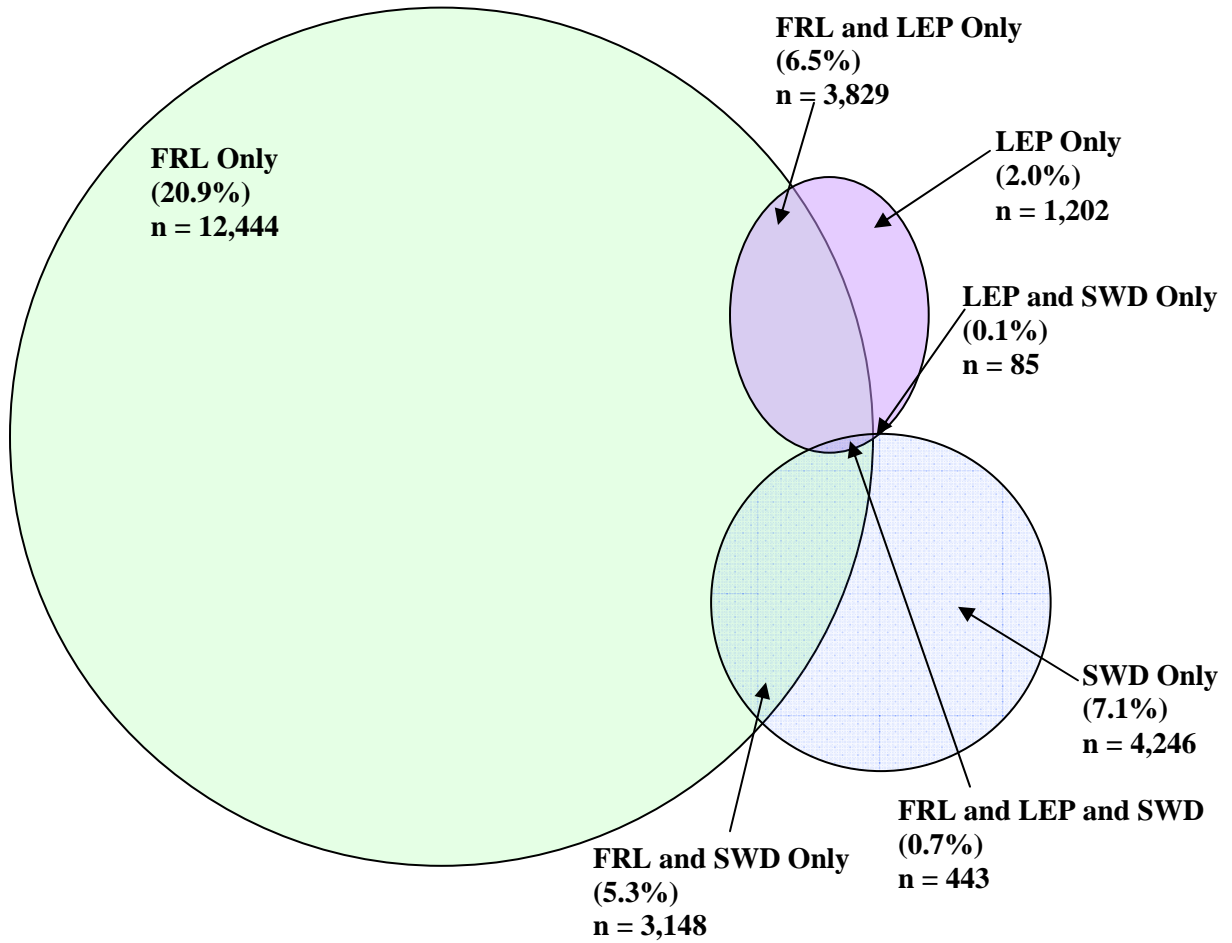
English proficiency of WCPSS LEP students is included in the IDEA Proficiency Test section of this report.

### Multiple Academic Risk Factors

Figure 18 displays the distribution of FRL, SWD, and LEP students at the elementary school level. As of the end of the 2005-06 school year, 25,397 (43%) of elementary school students were identified as FRL, SWD, and/or LEP. Of these, the most common academic risk factor was FRL for 19,864 students (33%); 7,922 (13%) were SWD, and 5,559 (9%) were LEP. Just over 10% 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 0.1% were identified with LEP as an additional academic risk factor.
- Of the 9% LEP students in WCPSS, 2% were identified as having LEP as a single academic risk characteristic.

**Figure 18**  
**Students with at Least One Academic Risk Factor**  
**Spring 2006, Grades K-5**



Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

Total n= 25,397 Unduplicated count

## TESTING OUTCOMES—LITERACY

### KINDERGARTEN INITIAL ASSESSMENT RESULTS

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, math, 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, with the settings and tasks 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** – number of letters the student can identify
- **Letter Sound** – if a student identifies 26 letters (either upper or lower case), then the Letter Sound assessment is given
- **Phonological Awareness Skills Test (PAST)** – the first five subtests (Concept of Spoken Word, Rhyme Recognition, Rhyme Production, Syllable Blending, and Syllable Segmentation) are administered.
  - If a student makes three consecutive errors in a subtest, the subtest is discontinued and the next subtest is administered.
  - If a student masters each of the first five subtests, then the remaining three subtests are administered (Syllable Deletion, Phoneme Isolation – Initial Sounds, and Phoneme Isolation – Final Sounds). If a student does not show mastery of the first five subtests of the PAST during the KIA, those subtests are re-administered at the end of the first semester.

**Oral Language Checklist** – The student is observed during the KIA and the first two weeks of school to complete the checklist, which measures conversational skills.

Results for the other areas 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 2005 based on teachers' submissions through an electronic survey process.

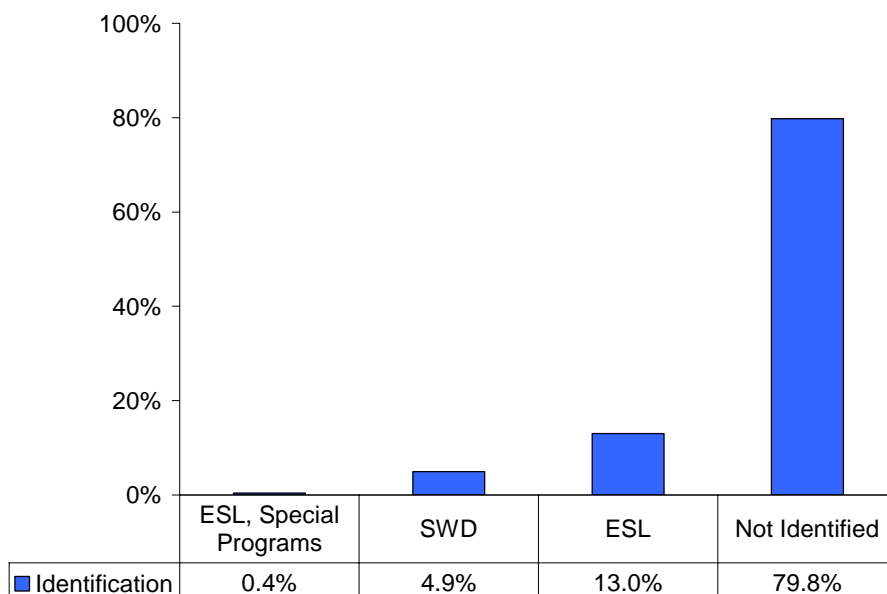
The KIA measures some skills that students typically have upon entry to kindergarten, and others that are more advanced. Results for 2005-06 show that most students entering kindergarten in WCPSS demonstrate the basic literacy skills assessed.

### 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 2005-06, 10,630 students were expected to be assessed and 10,356 records were returned, for an overall return rate of 97%. 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.

The following figure shows that 13% of the entering kindergarten students were received English as a Second Language (ESL) services and 5% were students with disabilities (SWD).

**Figure 19**  
**ESL/SWD Identification, 2005-06, Kindergarten**



n = 10,356 students assessed.

Nearly three fourths (73%) of the parents of students entering kindergarten reported their child attended preschool 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.

### 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 9 indicates that:

- 73% of kindergarteners could identify six or more print concepts,
- 77% could identify 11- 54 letters (upper- and lower-case letters are counted separately).

In terms of more advanced skills:

- 36% were proficient in retelling a story,
- 42 % could identify 11-54 letter sounds, and
- 14% could identify six or more words.

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

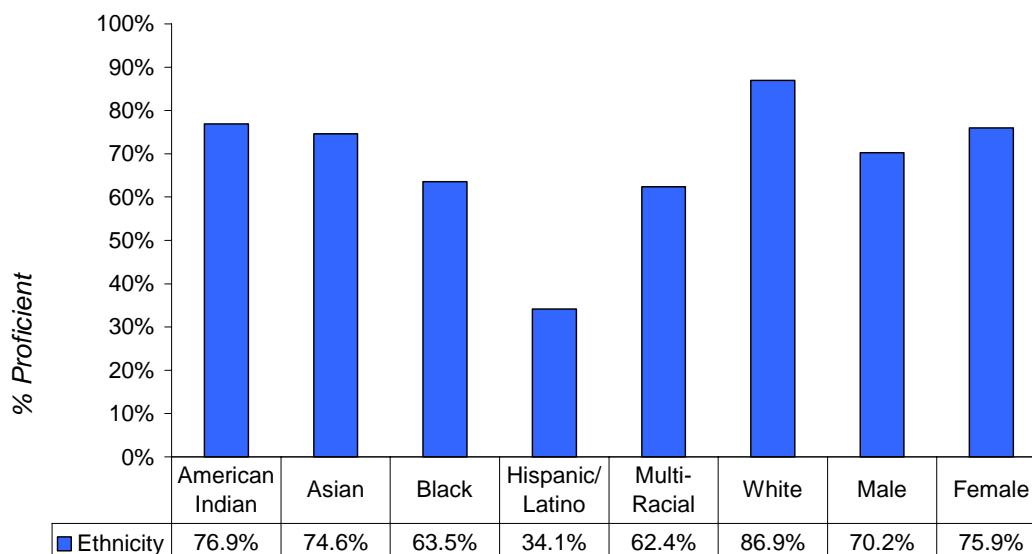
**Table 9**  
**Literacy Assessment Results, 2005-06, Kindergarten**

Print Concepts		Retelling		Letter ID		Letter Sound		Word ID	
Range	%	Score	%	Range	%	Range	%	Range	%
		<b>0</b>	3.9%	<b>0</b>	7.0%	<b>0</b>	35.0%	<b>0</b>	56.2%
<b>1-5</b>	22.7%	<b>1</b>	8.4%	<b>1-10</b>	11.6%	<b>1-10</b>	13.3%	<b>1-5</b>	26.0%
<b>6-10</b>	27.9%	<b>2</b>	47.7%	<b>11-20</b>	8.0%	<b>11-20</b>	9.9%	<b>6-10</b>	4.6%
<b>11-19</b>	45.2%	<b>3</b>	30.7%	<b>21-54</b>	69.2%	<b>21-54</b>	32.1%	<b>11-21+</b>	9.0%
		<b>4</b>	5.1%						
<b>Number of Students: 10,356</b>									

By ethnicity, some differences were evident in the percentage of students who could identify six or more print concepts. Hispanic/Latino students were least likely to be able to identify six or more print concepts, with the other groups ranging from just over 60% (Multiracial and Black/African American students, respectively) to 87% (White students). Girls were slightly more likely to identify six or more print concepts than boys.

**Figure 20**

**Students Who Can Identify Six or More Print Concepts by Ethnicity and Gender, Fall 2005, Kindergarten**



n = 10,356

### 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. 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 (60%) and rhyme recognition (49%). 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 10**  
**Phonological Awareness Skills Test (PAST), 2005-06, Kindergarten**

Number of Items Correct	Concept of					Syllable Segmentati on	Syllable Deletion	Phoneme Isolation (Initial Sounds)	Phoneme Isolation (Final Sounds)
	Spoken Word	Rhyme Recognition	Rhyme Production	Syllable Blending					
<b>0</b>	14.9%	14.4%	38.8%	22.7%	22.0%	36.6%	65.1%	79.4%	
<b>1</b>	10.4%	2.7%	5.2%	2.3%	3.0%	2.3%	1.8%	2.6%	
<b>2</b>	8.9%	6.1%	4.1%	2.5%	3.5%	2.2%	1.9%	1.8%	
<b>3</b>	15.8%	8.2%	5.1%	3.5%	7.4%	3.3%	2.5%	1.8%	
<b>4</b>	18.4%	15.3%	6.6%	4.5%	24.3%	5.0%	3.1%	2.3%	
<b>5</b>	<b>17.7%</b>	<b>13.1%</b>	<b>12.0%</b>	<b>9.5%</b>	<b>17.2%</b>	6.9%	7.1%	3.5%	
<b>6</b>	<b>9.7%</b>	<b>36.1%</b>	<b>24.2%</b>	<b>50.9%</b>	<b>18.5%</b>	14.2%	14.4%	4.5%	

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. Two thirds or more of the students entering kindergarten in WCPSS met or exceeded this standard in all areas except "Asking Questions." Slightly more than half (56%) of the students met the standard in that category.

**Table 11**  
**Oral Language, 2005-06, Kindergarten**

Score	Communicates			
	Starts Conversation	Personal Experience	Asking Questions	Talks While Pretending
<b>1</b>	4.8%	8.2%	9.4%	5.1%
<b>2</b>	18.9%	20.9%	30.7%	20.8%
<b>3</b>	<b>53.2%</b>	<b>52.3%</b>	<b>45.9%</b>	<b>57.1%</b>
<b>4</b>	<b>18.9%</b>	<b>14.4%</b>	<b>9.7%</b>	<b>12.6%</b>

Note: Bold indicates mastery (or beyond)

## K-5 ASSESSMENT RESULTS

### Literacy Results

This section summarizes trends for K-5 assessment results in 2005-06. More detail is available in a separate E&R bulletin (Rhea, 2006). The return rate for assessment results was 91%, down slightly from 2004-05.

#### *Receptive Literacy Trends*

One common measure for students in grades K-2 is instructional book levels. Books that emphasize specific reading objectives are available for each of the 32 book levels through which students advance, as they become increasingly proficient readers. Book-level standards, reflecting fluency and understanding of the text, are set for each grade level as guidelines for assessing grade-level fluency.

- At least 80% of the students in grades K, 1, & 2 demonstrated desired reading skills by spring of 2006. Longitudinal results suggest a relatively continuous pattern of annual improvement in the percentage of kindergarten students achieving book-level standards since 2001-02, whereas performance remains relatively stable for 1<sup>st</sup>- and 2<sup>nd</sup>-grade students. Eighty-nine percent of kindergarten students met book-level standards in 2005-06, which is a ten-percentage point improvement from 2004-05.
- Similar to 2004-05, subgroup results revealed differences in the reading book-levels of elementary students. Hispanic/Latino students, free or reduced-price lunch (FRL) students, students with disabilities (SWD), and limited English proficient (LEP) students continue to show a need for instructional assistance to improve reading proficiency. These student subgroups experienced larger gains in reading book-level proficiency between 2004-05 and 2005-06 than other subgroups, closing achievement gaps slightly.
- Most students in grades 2-5 (73%) scored proficient on reading strands with only modest variations in performance across strands. Fifth-grade students have higher percentages of proficiency on reading strands compared to 3<sup>rd</sup>- and 4<sup>th</sup>-grade students. This pattern is similar to reading EOG results for 2005-06.
- Lower percentages of students in grades 3-5 performed at or above grade level on expository (58%) and narrative (58%) assessments. Almost no changes were found in proficiency rates on expository rubric assessments between 2004-05 and 2005-06. Proficiency results were relatively similar between 2004-05 and 2005-06 narrative rubric assessments with only slight declines at grades 3 and 4.

Receptive literacy is measured in a variety of ways. One common measuring tool is books that represent certain reading levels. Book-level standards are set as guidelines for each grade K – 2; standards reflect fluency and understanding of text.

Table 12 shows 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.

**Table 12**  
**Reading Book-Level Standards, 2001-02 to 2005-06, Grades K-2**

	# Students Assessed	% Achieved Standard
<b>Grade K (Book-Level Standard 3-4)</b>		
2001-02	7,805	74.4%
2002-03	8,706	76.9%
2003-04	8,067	80.3%
2004-05	9,346	79.0%
2005-06	8,234	89.0%
<i>Percentage point change 2001-02 to 2005-06</i>		+14.6
<b>Grade 1 (Book-Level Standard 15-16)</b>		
2001-02	7,888	79.7%
2002-03	8,445	79.7%
2003-04	7,981	80.9%
2004-05	9,310	81.4%
2005-06	8,535	81.0%
<i>Percentage point change 2001-02 to 2005-06</i>		+1.3
<b>Grade 2 (Book-Level Standard 23-24)</b>		
2001-02	7,597	84.2%
2002-03	8,189	84.2%
2003-04	7,411	83.8%
2004-05	8,668	84.7%
2005-06	9,024	83.8%
<i>Percentage point change 2001-02 to 2005-06</i>		-0.4

Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

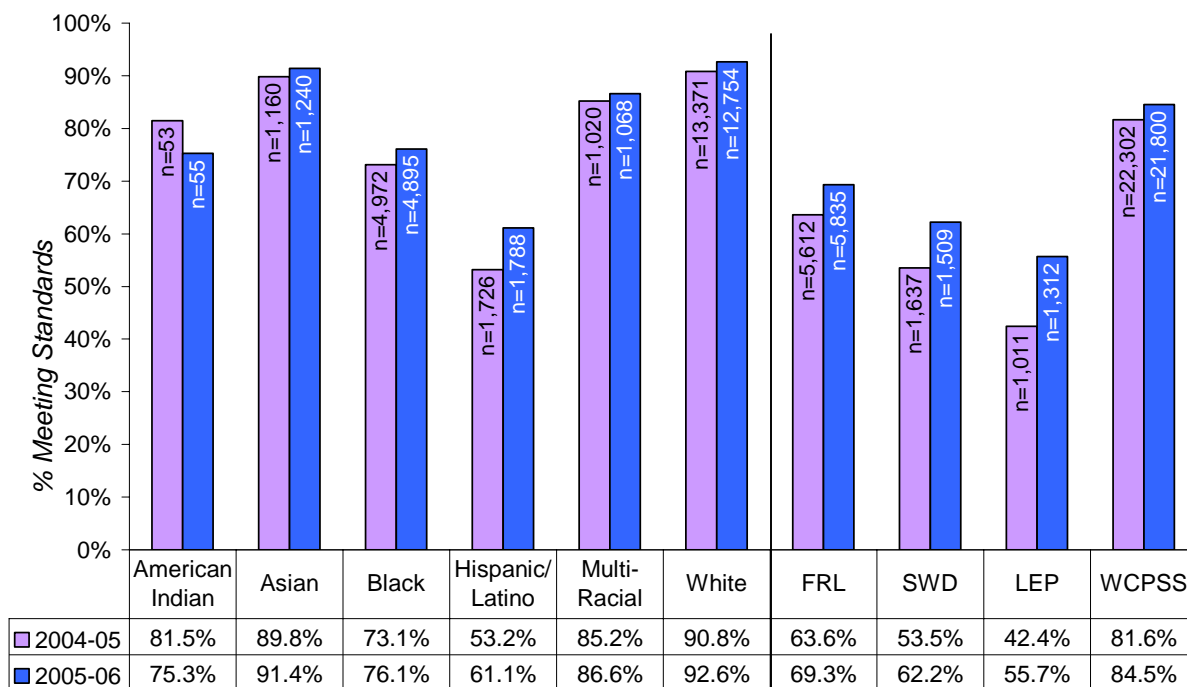
According to subgroup results presented in the following figure, groups of students have diverse levels of reading achievement at grades K-2. Student subgroups with the lowest reading proficiency rates had the greatest gains between 2004-05 and 2005-06.

- 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 2005-06 (a 13.3 percentage point increase).
- SWD students, Hispanic/Latino students and FRL students also had relatively large gains in reading proficiency between 2004-05 and 2005-06 (8.7 percentage points, 7.9 percentage points and 5.7 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 2005-06, the largest achievement gap was between White students and LEP students, at 36.9 percentage points.

**Figure 21**

**Students Meeting Book-Level Standards by Subgroups, 2005-06, Grades K-2**



Note: N 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: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

As illustrated in the following table, most 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 13**  
**Reading Strands Proficiency, 2005-06, Grades 2-5**

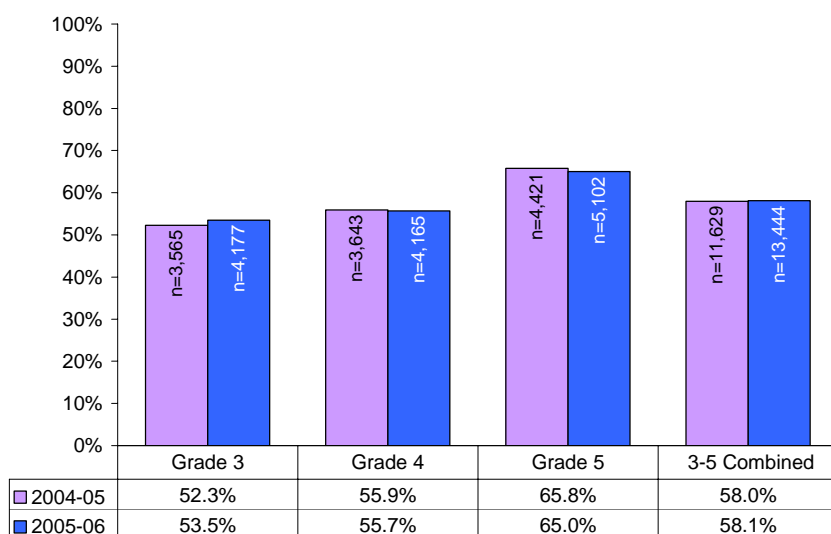
Grade	Reading Strands			All Reading Strands			
	Reading Habits	Vocabulary Strategies	Text Comprehension	Proficient in All Strands	Data Reported	Missing eMARC	Missing Data Capture
2	86.5%	83.7%	81.6%	77.5%	9,207	162	240
3	81.3%	77.0%	76.3%	70.4%	8,871	131	118
4	79.3%	75.4%	75.9%	69.3%	8,368	156	86
5	82.9%	80.2%	81.2%	75.5%	8,590	124	94
<b>2-5 Combined</b>	<b>82.6%</b>	<b>79.2%</b>	<b>78.8%</b>	<b>73.3%</b>	<b>35,036</b>	<b>573</b>	<b>538</b>

Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

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

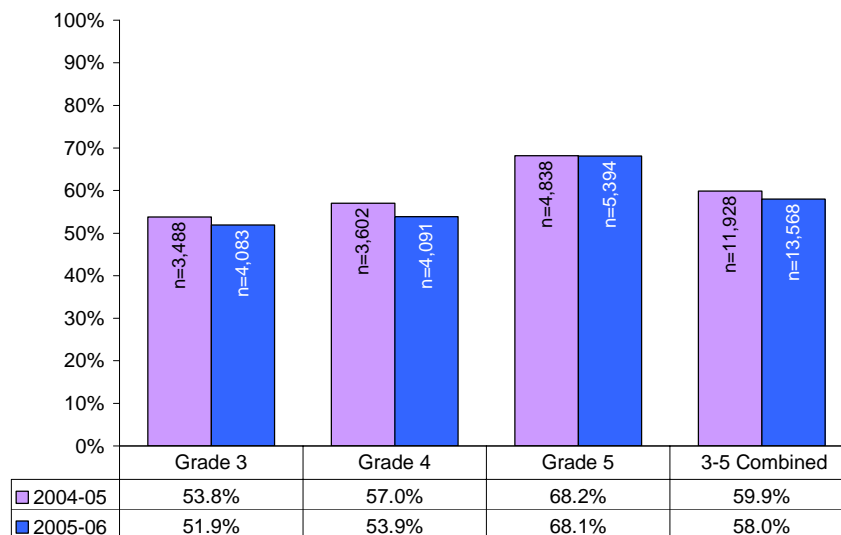
Similar to 2004-05 results, the following figures show that the majority of students in grades 3-5 scored proficient on the expository and narrative rubric assessments. These assessments require that students read passages and respond with short answers. Because students must demonstrate both reading and writing skills on these assessments, they are often less likely to score proficient than on other measures of literacy. Fifth graders show the strongest performance.

**Figure 22**  
**Expository Rubric Proficiency, 2004-05 to 2005-06, Grades 3-5**



Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

**Figure 23**  
**Narrative Rubric Proficiency, 2004-05 to 2005-06, Grades 3–5**



Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

### *Expressive Literacy Trends*

Across grades on several measures of writing performance, just over half of WCPSS demonstrated proficient writing skills. Proficiency on writing content was higher (67%) based on a writing portfolio at grades 3-5.

- More than half (55%) of the students in grades K-2 met stage-of-writing standards for their unassisted writing samples. The percentage of 2<sup>nd</sup>-grade students who demonstrated grade-level proficiency was considerably lower, with only 27% meeting the grade-level standard. A higher percentage of 2<sup>nd</sup>-grade students were writing at the stage just below the standard.
- The majority (59%) of students in grades 2-5 scored proficient on writing strands with greater variations in performance across strands.
- Slightly more than half (54%) of students in grades 3-5 scored proficient on writing conventions. The percentage of 3<sup>rd</sup>- through 5<sup>th</sup>-grade students who mastered writing content, based on assessments of their most recent writing collection, was 67%. Interestingly, 4<sup>th</sup>-grade students were less likely to meet grade-level writing conventions and writing content proficiency standards than were 3<sup>rd</sup>- and 5<sup>th</sup>-grade students. (Fourth graders must take the state assessment of writing.)

The following table shows that slightly more than half of all students in grades K-2 achieved grade-level writing standards. Grade-level results show substantial variation in the percentage of students who achieved the stage-of-writing standard on their unassisted writing sample, especially at grade 2.

**Table 14**  
**Stage-of-Writing Standard for Most Recent**  
**Unassisted Writing Sample, 2005-06, Grades K-2**

Grade	Stage-of-Writing Standard	# Students % Achieved	
		Assessed	Standard
<b>K</b>	<b>Late Emergent</b>	9,193	73.3%
<b>1</b>	<b>Late Developing</b>	8,728	66.2%
<b>2</b>	<b>Late Independent</b>	9,208	26.5%
<b>K-2 Combined</b>		<b>27,129</b>	<b>55.2%</b>

Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

The following table shows the majority of all students in grades 2-5 demonstrated proficiency on all writing strands, with the best performance among 5<sup>th</sup>-grade students.

**Table 15**  
**Writing Strands Proficiency, 2005-06, Grades 2-5**

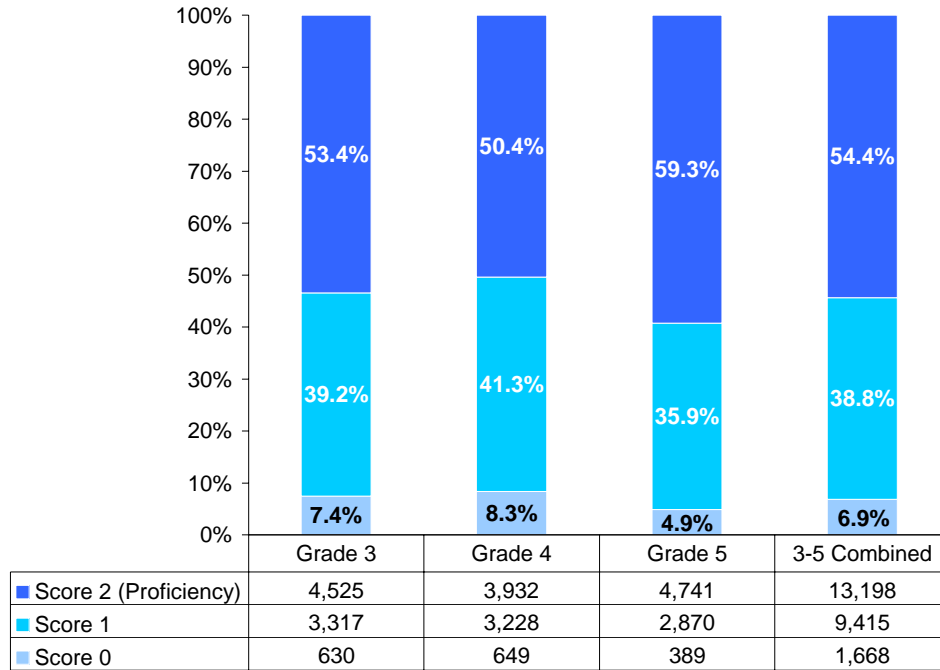
Grade	Writing Strands					All Writing Strands			
	Prewriting	Drafting	Revising	Editing	Publishing	Proficient in All Strands	Data Reported	Missing eMARC	Missing Data Capture
<b>2</b>	78.6%	75.9%	68.0%	66.3%	80.0%	60.6%	9,147	205	257
<b>3</b>	74.4%	72.2%	60.8%	61.3%	76.2%	54.3%	8,802	182	136
<b>4</b>	70.6%	68.3%	59.9%	59.2%	73.0%	52.5%	8,253	235	122
<b>5</b>	78.3%	78.4%	72.6%	71.6%	80.6%	66.8%	8,545	170	93
<b>2-5 Combined</b>	<b>75.6%</b>	<b>73.8%</b>	<b>65.4%</b>	<b>64.6%</b>	<b>77.5%</b>	<b>58.6%</b>	<b>34,747</b>	<b>792</b>	<b>608</b>

Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

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

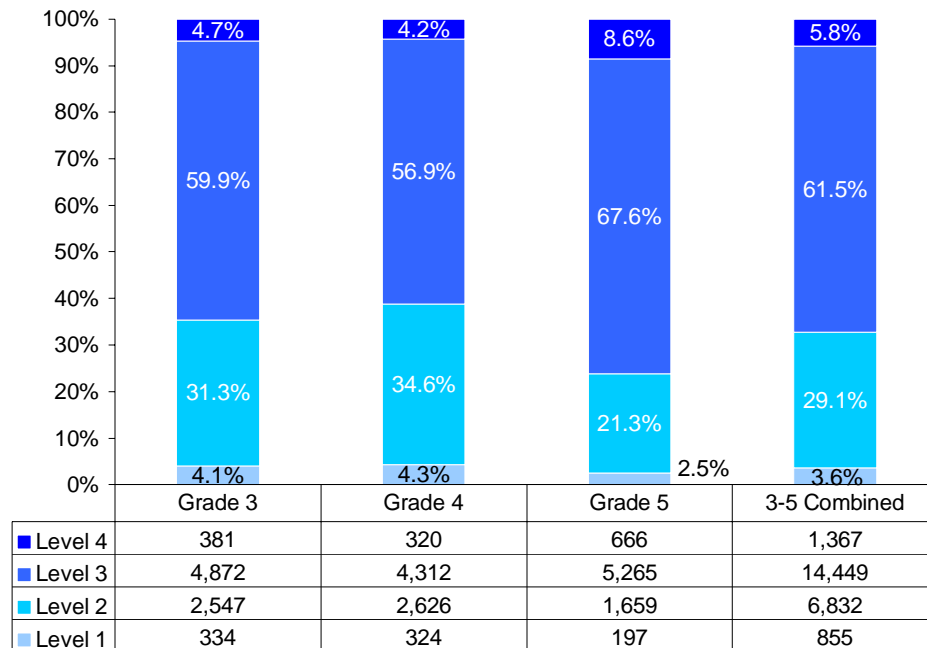
Results displayed in the following figure show that 54% of students in grades 3-5 were considered proficient on writing conventions, that is, they received a score of 2 on their edited, final draft within their writing portfolio. Figure 25 shows that a higher percentage of students (67%) have writing content mastery, based on assessments of their most recent writing collection.

**Figure 24**  
**Writing Conventions, 2005-06, Grades 3-5**



Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

**Figure 25**  
**Writing Content Rubric for Most Recent Writing Collection, 2005-06, Grades 3-5**



Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

## END-OF-GRADE (EOG) MULTIPLE-CHOICE TEST READING RESULTS

The achievement level score categorizes student performance on EOG tests according to four broad levels, defined by the North Carolina (NC) Department of Public Instruction (DPI). General descriptions are shown below, with more specifics available at the DPI Web site's Accountability section ( [www.ncpublicschools.org](http://www.ncpublicschools.org) ).

**Table 16**  
**Achievement Levels for the North Carolina Testing Program**

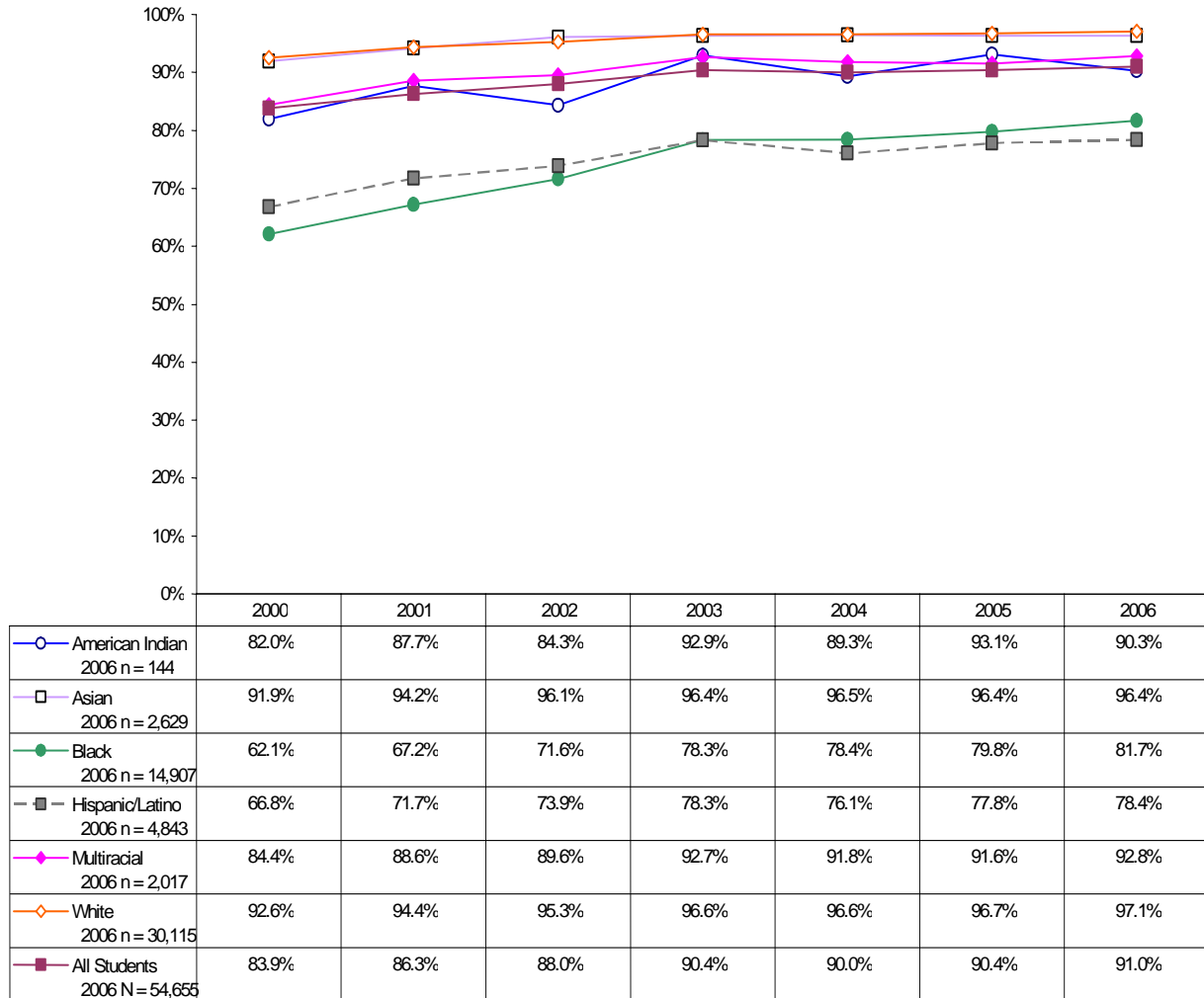
<p><b>Level I:</b> Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.</p>	<p><b>Level III:</b> Students performing at this level consistently demonstrate mastery of grade level subject matter and skills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

### Grades 3-8

We have monitored achievement gaps by ethnicity for many years. We also include trends for groups with academic risk factors such as low income (FRL), SWD, and LEP later in this section. Overlap exists between these groups, with higher percentages of Black/African American and Hispanic/Latino students being FRL and LEP than is true for all other subgroups. While some students in all of these academic risk groups show high achievement, overall proficiency results are lower.

- The percentage of students in all ethnic groups scoring at grade level has improved over time, with Black/African American students showing the most improvement (close to 20 percentage points).
- In spring 2006, the achievement gap between Black/African American and White students was 15 percentage points, with a 19-percentage-point gap between Hispanic/Latino and White students. These gaps are considerably smaller than was the case in 2000-01 (when gaps were 31 percentage points and 26 percentage points, respectively).

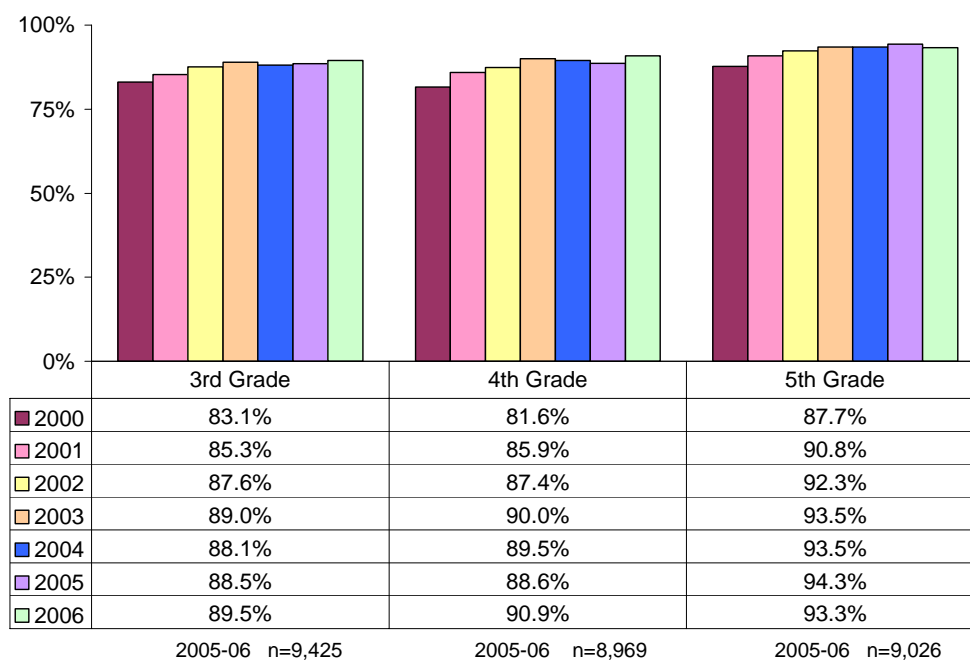
**Figure 26**  
**Students Proficient on Spring Reading EOG by Race,**  
**Spring 2000-06, Grades 3-8**



### Grades 3-5

At the elementary level, over 90% of WCPSS students who took the multiple-choice versions of the EOG test met or exceeded grade-level standards in reading in spring 2006. The pattern of performance has varied slightly across grade levels every year since spring of 2000, with grade 3 showing the lowest percentage of students at grade level (90% in spring 2006) and grade 5 the highest (93% in spring 2006). Since spring of 2000, the percentage of students scoring at grade level has generally increased within each grade level.

**Figure 27**  
**EOG Reading Proficiency by Grade Level,**  
**Spring 2000-06, Grades 3-5**

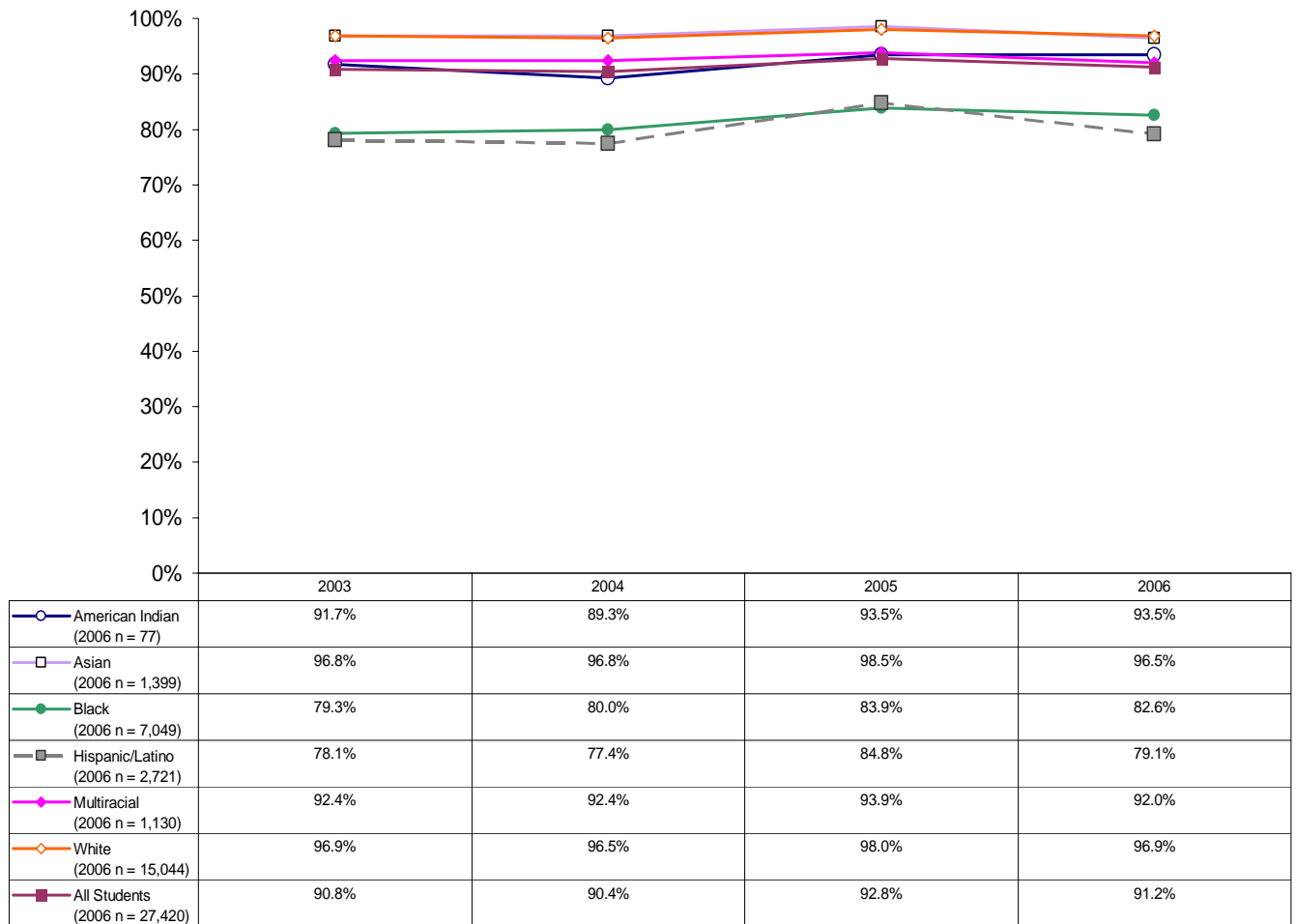


As previously discussed, ethnic achievement gaps closed somewhat across grades 3-8 between 1999-2000 and 2005-06 (see Figure 26). However, results by ethnicity have only been monitored separately for grades 3-5 since 2002-03. Since that time, a review of elementary reading performance by ethnicity and gender reveals the following trends (see Figures 28-29 and Table 17):

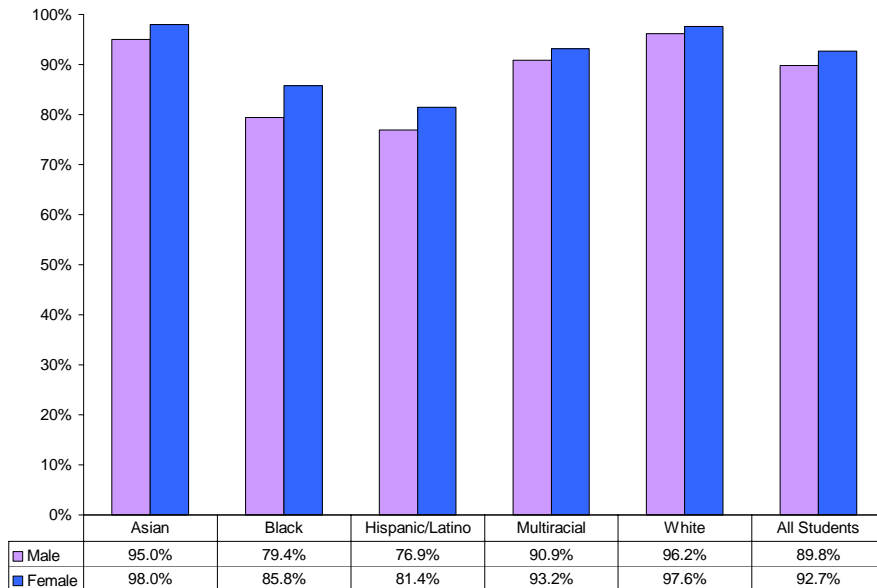
- Reading achievement has been relatively stable since spring 2003. Black/African American students showed the greatest positive change during this period.
- In 2005-06, the percent proficient varied from 79% to 97% by ethnicity, with White and Asian students showing the highest percentage of students scoring at grade level, and Hispanic/Latino and Black/African American students showing the lowest percentages.
- Slightly larger percentages (about three percentage points) of females than males achieved proficiency in reading. This was true in five of six ethnic subgroups.

Two factors may have contributed to the 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.

**Figure 28**  
**Students Proficient on Reading EOG by Race, Spring 2003-06, Grades 3-5**



**Figure 29**  
**Percentages of Students Proficient on Reading EOG**  
**by Ethnicity and Gender, Spring 2006, Grades 3-5**

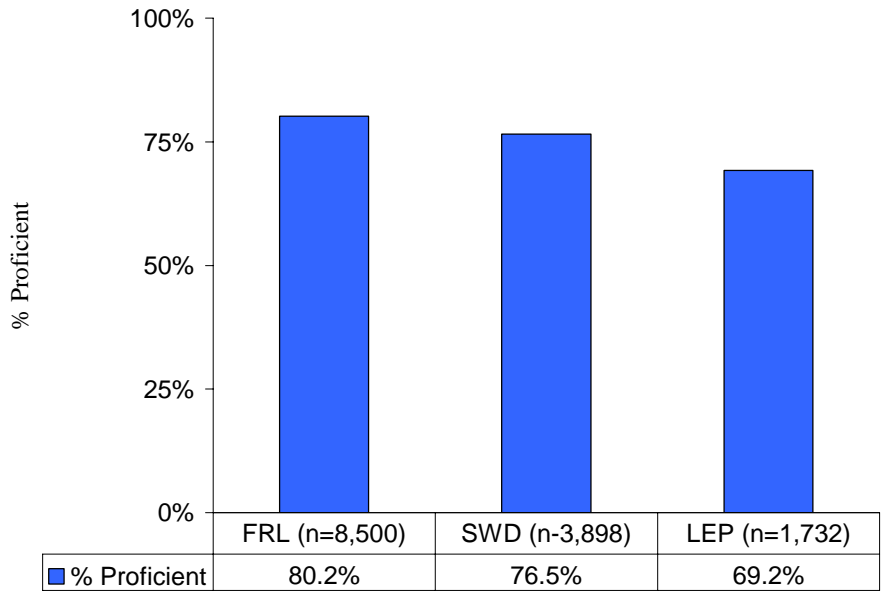


**Table 17**  
**Numbers of Students Proficient on Reading EOG by Ethnicity and Gender,**  
**Spring 2006, Grades 3-5**

	American Indian	Asian	Black/ African American	Hispanic/ Latino	Multi-racial	White	Total
<b>Male</b>	34	696	3,555	1,358	574	7,736	13,953
<b>Female</b>	43	703	3,494	1,363	556	7,308	13,467

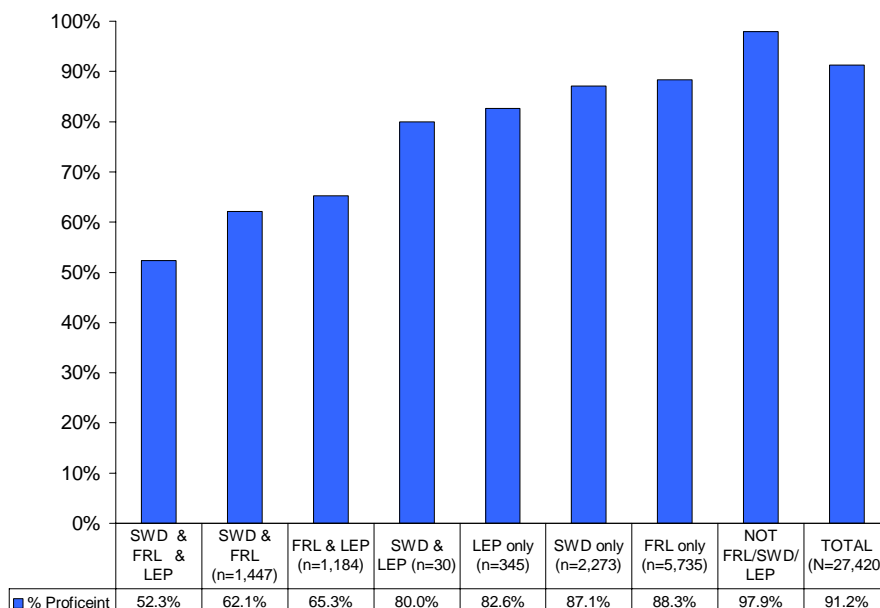
Students who received free or reduced-price lunch (FRL), students with disabilities (SWD), or students with limited English proficiency (LEP) are less likely to score at grade level than students without an academic risk factor, especially if they have more than one of these academic risk characteristics.

**Figure 30**  
**Percentages of Students Proficient on Reading EOG by Academic Risk Factors,**  
**Spring 2006, Grades 3-5 (Duplicated Count)**



Note: Duplicated count.

**Figure 31**  
**Percentages of Students Proficient on Reading EOG by Academic Risk Factors**  
**Spring 2006, Grades 3-5 (Unduplicated Count)**



Note: Count is unduplicated.

## WRITING ASSESSMENT (GRADE 4)

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 NC 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, DPI 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.

Exemptions from the writing assessment are slightly different than for the EOG, with additional alternative assessments available. LEP students are exempt if they first entered a U.S. school in 2005-06 and they scored below intermediate high on their reading Idea Proficiency Test Scores (IPT). These students are tested in writing with the IPT instead. NC CLAS students who are LEP and in their first or second year in the United States are also exempt from the writing test.

## 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 prior model. Therefore, comparisons to previous years are inappropriate. Beginning in 2002-03, the essays were scored by two individual readers who evaluated both content (focus, organization, support and elaboration, and style) and conventions (sentence formation, usage, and mechanics). 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 was 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 NC state tests, total scores from the writing test are organized into four achievement levels (I, II, III, and IV). The level definitions are similar to those used for End-of-Grade (EOG) and End-of-Course (EOC) testing. Level I scores are considered far below grade level, Level II slightly below grade level, Level III at grade level, and Level IV well above grade level (see the following table). 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 18**  
**Writing Test Total Score Ranges by Level, 2005-06**

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 upon the type of writing and subject matter of the prompt. Figure 32 shows the prompts utilized by DPI for the 2005-06 writing assessments. Based upon the recommendations of the NC Writing Assessment Task Force and the State Board of Education Ad Hoc Writing Committee, the grade 4 prompt is currently in 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.

**Figure 32**  
**Grade 4 Writing Prompt for the 2005-06 School Year**

*Imagine you looked under your bed. You found a large green egg with silver spots. You pulled the egg out into the middle of room, and it began to shake and crack. Write a story about what happened the time the egg began to shake and crack.*

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

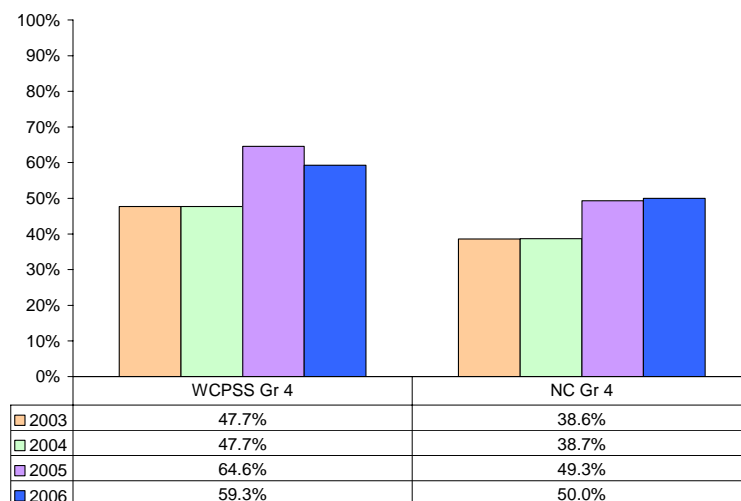
**Writing Assessment Results**

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 can 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 four 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 small jump 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. 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 33**  
**Percentage of Students Proficient on Writing Assessment, Spring 2003-06, Grade 4**

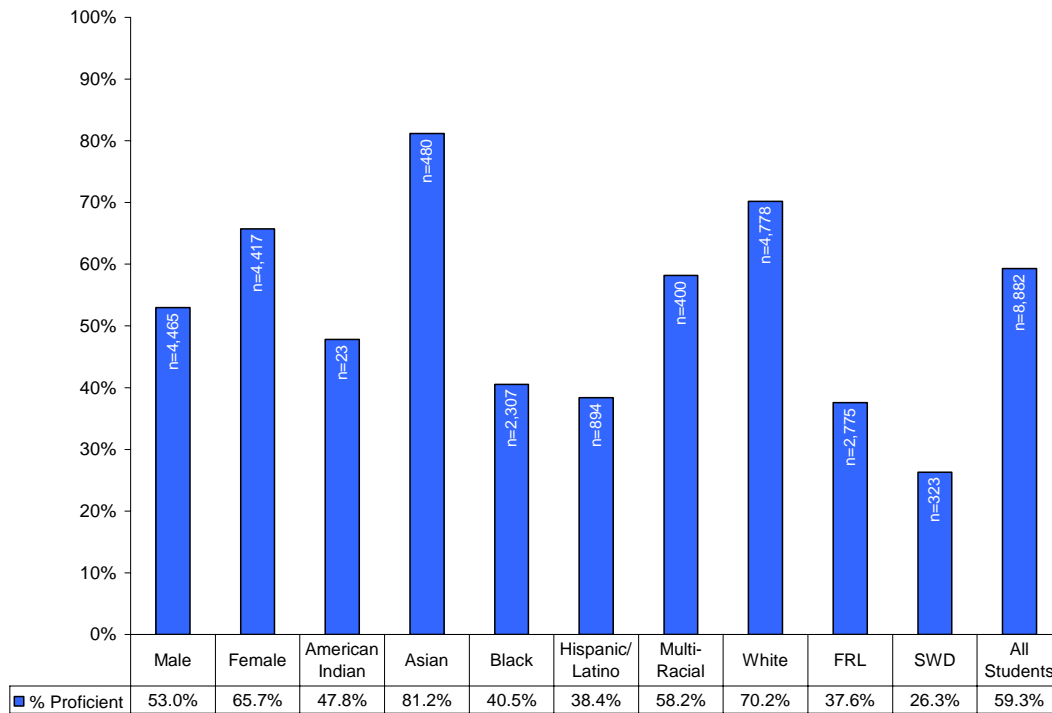


Notes: n=8,882 for WCPSS Spring 2006, n is not yet published for NC Spring 2006. Writing Test was not administered in 2000, 2001, or 2002.

When results are disaggregated by ethnicity and gender:

- Among various student subgroups in WCPSS, Asian, White, and female students were the only groups to reach a proficiency rate above 60% in 2005-06.
- The lowest proficiency rates in 2005-06 (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%.
- Male students were less likely to score at or above Level III than were female students (53% versus 66%, respectively).

**Figure 34**  
**Writing Test Results Disaggregated, 2005-06, Grade 4**



Source: July 2006 DPI report. (LEP data was not available at that time)

### IDEA PROFICIENCY TEST (IPT) SCORES

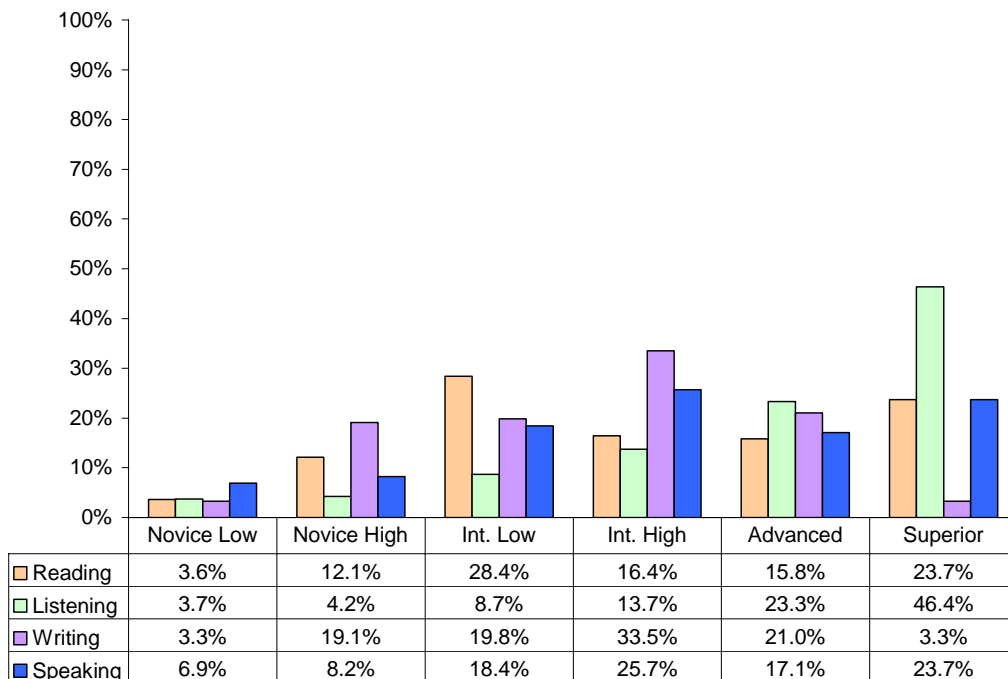
The IPT is the state assessment of English language proficiency. Any student whose home language survey indicates English is not the only language spoken in his or her home is assessed with this test. The IPT consists of four sections: Reading, Listening, Writing, and Speaking. Students can receive one 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.

A new IPT was administered to WCPSS students in spring 2006. The test was changed to meet the requirements of an English language proficiency test under Title III of NCLB. The new test differs from previous tests in that:

- All grade levels are administered the reading, listening, writing, and speaking sections of the test
- There is a greater focus on academic language
- It is designed to be more difficult

The following graph represents the distribution of test scores for each section of the IPT test. In general, students tend to achieve the highest levels of proficiency (Advanced or Superior) on the Listening section of the test (70%). Students tend to achieve the lowest levels of proficiency on the writing section of the test (24%).

**Figure 35**  
**IPT Scores of LEP Students, Spring 2006, Grades K-5**



White students scored the highest of any ethnic group on the listening and speaking portions of the IPT, and Asian students scored the highest on the reading and writing portions of the test. Hispanic/Latino students consistently had the largest percentage of scores in the Novice range. There were not enough American Indian or Multiracial students assessed by the IPT in spring 2006 to include in the following table. Within ethnic groups, no clear pattern is evident by gender (not shown).

**Table 19**  
**Performance of LEP Students by Ethnicity on the IPT,**  
**Spring 2006, Grades K-5**

<i>Reading IPT</i>	Novice Low	Novice High	Int. Low	Int. High	Advanced	Superior
Asian	2.7%	5.4%	20.2%	14.8%	16.0%	40.9%
Black/African American	3.1%	8.8%	24.4%	17.5%	17.5%	28.8%
Hispanic/Latino	4.1%	14.2%	30.7%	16.2%	15.2%	19.6%
White	0.9%	4.4%	20.9%	19.6%	18.7%	35.6%
<i>Listening IPT</i>	Novice Low	Novice High	Int. Low	Int. High	Advanced	Superior
Asian	3.6%	2.5%	6.3%	12.4%	18.7%	56.6%
Black/African American	1.3%	1.3%	3.8%	13.1%	21.9%	58.8%
Hispanic/Latino	4.1%	5.1%	10.0%	14.3%	24.3%	42.2%
White	0.9%	0.0%	4.0%	10.2%	24.0%	60.9%
<i>Writing IPT</i>	Novice Low	Novice High	Int. Low	Int. High	Advanced	Superior
Asian	3.6%	10.3%	11.4%	29.6%	36.8%	8.3%
Black/African American	3.8%	17.5%	18.1%	31.3%	23.1%	6.3%
Hispanic/Latino	3.3%	21.5%	21.7%	33.5%	17.6%	2.4%
White	1.8%	9.3%	16.4%	42.2%	28.4%	1.8%
<i>Speaking IPT</i>	Novice Low	Novice High	Int. Low	Int. High	Advanced	Superior
Asian	7.0%	5.8%	16.6%	24.7%	13.7%	32.3%
Black/African American	5.1%	0.0%	11.5%	30.8%	21.2%	31.4%
Hispanic/Latino	7.6%	9.6%	19.8%	25.4%	17.7%	20.0%
White	1.3%	3.1%	12.0%	28.4%	15.6%	39.6%
<i>Speaking IPT</i>	Novice Low	Novice High	Int. Low	Int. High	Advanced	Superior
Asian	7.0%	5.8%	16.6%	24.7%	13.7%	32.3%
Black/African American	5.1%	0.0%	11.5%	30.8%	21.2%	31.4%
Hispanic/Latino	7.6%	9.6%	19.8%	25.4%	17.7%	20.0%
White	1.3%	3.1%	12.0%	28.4%	15.6%	39.6%

n=3,501

Data Source: May 2006 (5/1/06) Student Locator merged into July 2006 End-of-Year Summary

## TESTING OUTCOMES—MATHEMATICS

### KINDERGARTEN INITIAL ASSESSMENT RESULTS (KIA): 2005-06

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, math, 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 2005 based on teachers' submissions through an electronic survey process.

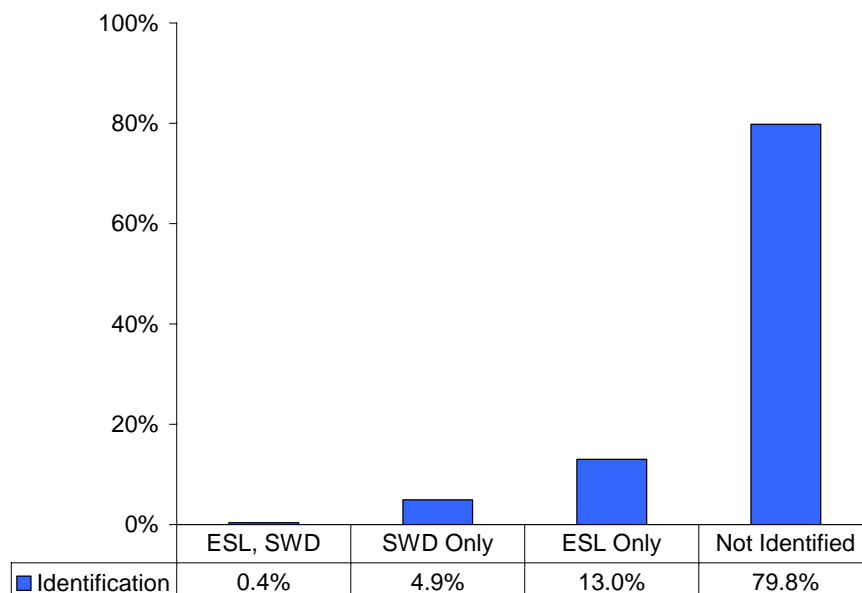
Results for 2005-06 show that over three fourths of the students entering kindergarten in WCPSS demonstrate all mathematics skills assessed except recognizing rectangles. Hispanic/Latino students showed lower mastery than other ethnic subgroups. More than three fourths of kindergarten students assessed showed each physical skill assessed, with more variable demonstration of each personal/social skill assessed (62% to 89%).

#### 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 2005-06, 10,630 students were expected to be assessed and 10,356 records were returned, for an overall return rate of 97%. 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 36 shows that 13% of the entering kindergarten students were identified as receiving English as a Second Language (ESL) services and 4.9% were students with disabilities (SWD).

**Figure 36**  
**ESL/SWD Identification, 2005-06, Kindergarten**



N = 10,356

Note: Students are included only in one bar

Nearly three fourths (73%) 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.

High percentages of students entering kindergarten in the 2005-06 showed reasonable early mathematics skills.

- More than 80% of students could count higher than 10 on the rote counting assessment,
- More than 80% recognized a circle, square, and triangle,
- 74% recognized the next step in a pattern and were able to copy a pattern.

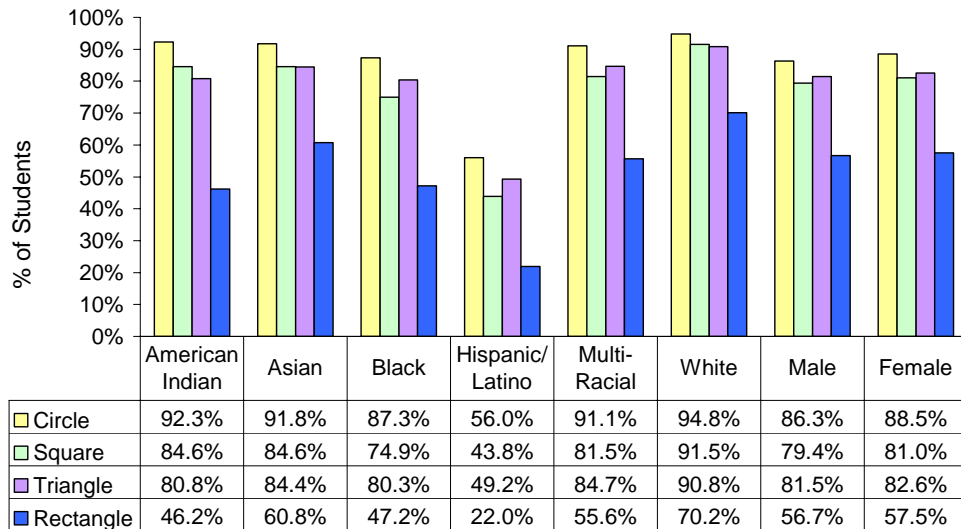
Lower percentages of students recognized a rectangle (57%) or were able to create a new pattern (52%).

**Table 20**  
**Math, 2005-06, Kindergarten**

Rote Counting		One-to-One		Geometry		Patterns		
0	2.0%	6 objects	11.4%	Circle	87.4%	Next	Copies	New
Range 1-10	12.5%	10 objects	76.9%	Square	80.2%			
Range 11-20	30.8%	Not Yet	7.8%	Triangle	82.1%			
Range 21-50+	50.8%	Null Answer	3.9%	Rectangle	57.1%	Yes	74.0%	73.8%
				Not Yet	4.9%	No	22.1%	22.3%
								52.2%
								43.9%

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

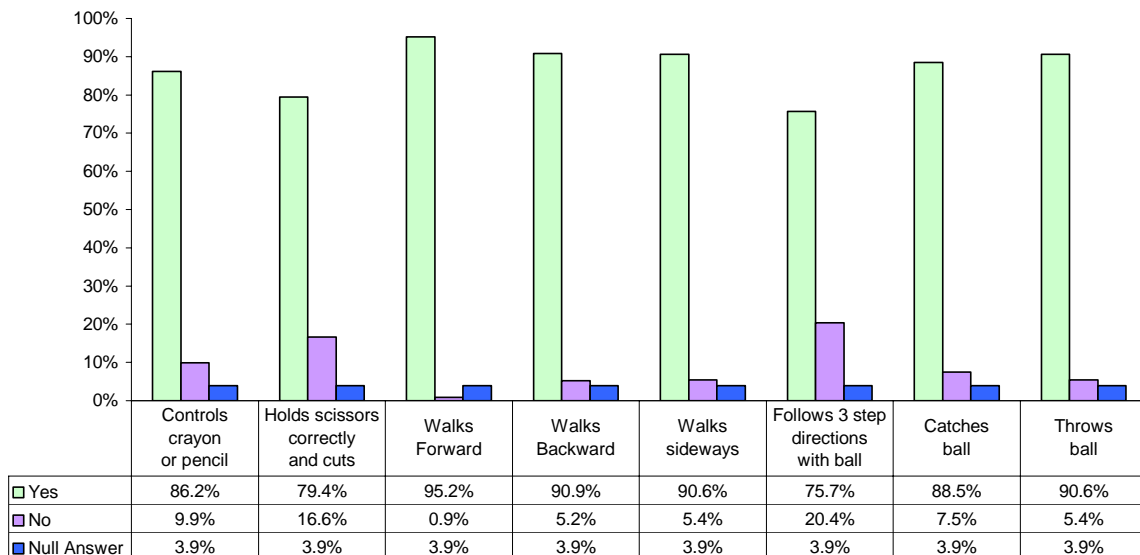
**Figure 37**  
**Students Recognizing Math Shapes**  
**by Race and Gender, 2005-06, Kindergarten**



**Physical Skills**

The following figure indicates that well over 80% of incoming kindergarteners could complete most of the tasks in the expected physical skills area. Following three-step directions was the most difficult.

**Figure 38**  
**KIA Physical Skills Results, 2005-06, Kindergarten**



## Personal Social Inventory

Students are observed over a two week period for the Personal Social Inventory. The students' 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 62% 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 21**  
**Personal Social Inventory, 2005-06, Kindergarten**

Score	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
<b>1</b>	1.0%	2.3%	3.0%	5.4%	2.0%	3.4%	7.8%	4.6%	2.2%
<b>2</b>	6.4%	21.5%	15.2%	27.7%	19.6%	25.1%	23.8%	17.0%	10.7%
<b>3</b>	65.1%	59.2%	59.3%	53.7%	58.2%	52.8%	51.1%	61.2%	40.1%
<b>4</b>	23.4%	12.9%	18.4%	9.1%	15.9%	14.6%	13.1%	13.0%	42.7%
<b>3-4</b>	<b>88.5%</b>	<b>72.1%</b>	<b>77.7%</b>	<b>62.8%</b>	<b>74.1%</b>	<b>67.4%</b>	<b>64.2%</b>	<b>74.2%</b>	<b>82.8%</b>

## WCPSS K-5 ASSESSMENT MATHEMATICS RESULTS

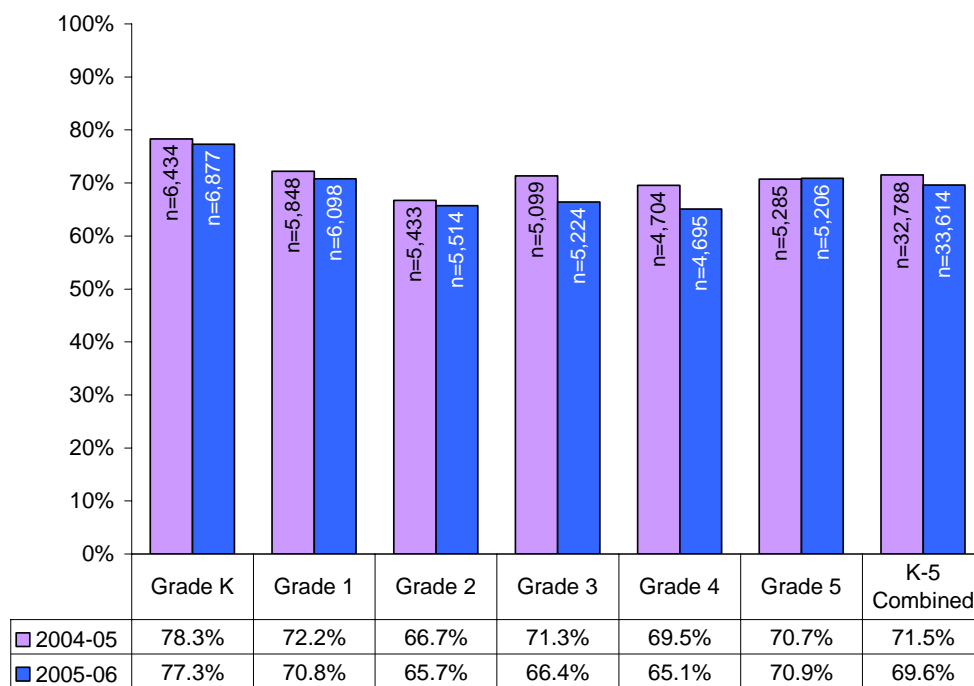
This section summarizes trends for K-5 assessment results in 2005-06. More detail is available in a separate E&R bulletin (Rhea, 2006).

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 conceptual-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.

To complement the new curriculum, a selection committee chose Math Trailblazers as the new mathematics materials and included appropriate supplemental materials in a pacing guide for teachers. Observations of a random set of schools in early spring of 2006 found that only half of the teachers were using Math Trailblazers. Additional research is needed to examine the relationship between the use of Math Trailblazers and K-5 assessment mathematics trends.

The following figure compares the percentage of students proficient in all five mathematics strands over a two-year period. Generally, two thirds to three fourths of students showed proficiency on all strands. Although little change in proficiency rates occurred between 2004-05 and 2005-06, a slight downward trend in mastery percentages by grade is exhibited, with the largest declines in proficiency rates among 3<sup>rd</sup>- and 4<sup>th</sup>-grade students.

**Figure 39**  
**Mathematics Proficiency for All Strands,**  
**2004-05 to 2005-06, Grades K-5**



Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

Gaps among ethnic groups for mathematics proficiency are evident, as shown in the following figure.

- 2004-05 and 2005-06 results show the lowest performance in mathematics among SWD students, LEP students, Hispanic/Latino students, FRL students, and Black students.
- Overall, results based on 2005-06 assessments show slight to modest declines in proficiency since 2004-05, 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 trivial decreases in the percentage mastering all mathematics strands.
- In 2005-06, the largest gap was between Asian students and SWD students, at 45 percentage points.

**Figure 40**  
**Students Proficient in All Mathematics Strands by Subgroups**  
**2005-06, Grades K-5**



Note: N counts are total number of students proficient in that subgroup. A greater number of students were assessed in 2005-06 compared to 2004-05 in every subgroup except SWD students (not shown in Figure).  
 Data Source: 2005-06 K-5 Assessment Data and WCPSS Student Locator Data as of June 2006

## END-OF-GRADE (EOG) MULTIPLE-CHOICE MATHEMATICS TEST RESULTS

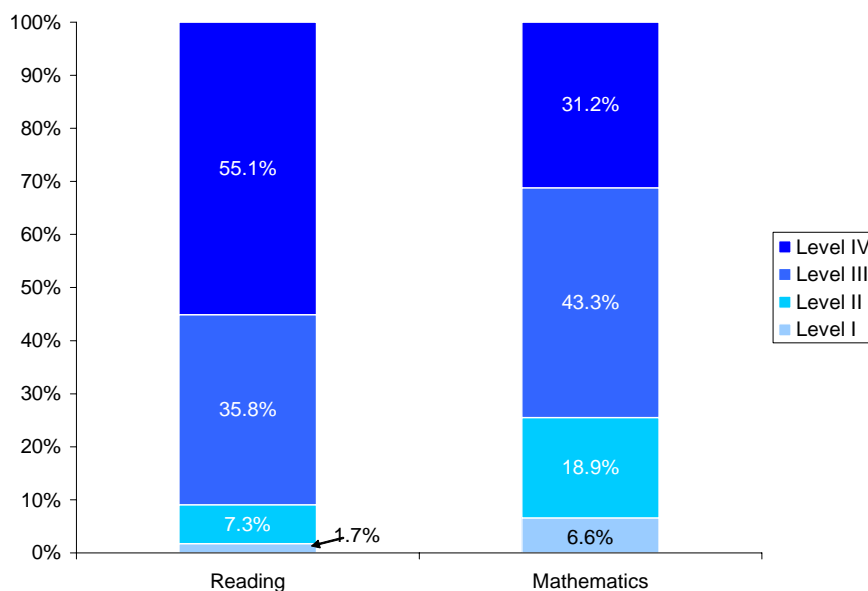
### EOG Scores by Achievement Level across Subjects

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). General descriptions are included in the EOG reading section of this report, with more specifics available at the DPI Website’s Accountability section ( [www.ncpublicschools.org](http://www.ncpublicschools.org) ). Level III and IV scores show mastery of grade-level material or beyond.

New mathematics tests were used in 2005-06 for the first time, with new cut scores for proficiency set in November, after the May test results were available for analysis. These new level cut scores were set based on the “reasoned judgment” method, which was the most difficult of the four methods considered. Thus, the mathematics standard is more rigorous than in past years. Therefore, results from 2005-06 do not reflect a drop in performance, but rather a new standard for grade level that is more difficult to reach based on a new curriculum and test. Comparisons to past years can not be made validly. In this report, results are shared over time for reading only because of this change.

In previous years, reading and mathematics proficiency levels were similar. An analysis of all grade 3-8 EOG scores by achievement level for 2005-06 shows the mathematics proficiency standard is more difficult to meet than the reading standard. In reading, 91% (49,753 of 54,655) of students scored as proficient, while 75% (40,804 of 54,768) students scored at the level considered proficient in math.

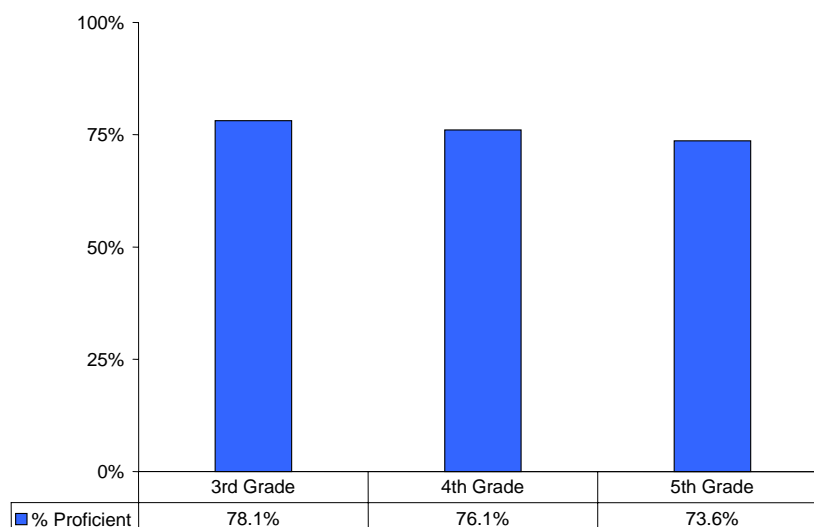
**Figure 41**  
**Reading and Mathematics, EOG Scores by Achievement Level, Spring 2006, Grades 3–8**



## Mathematics EOG Results

With the new standards set for mathematics, the overall percent of students who scored proficient was 76%. The percentage was slightly higher at grade 3 and at grade 4 than at grade 5, similar to the statewide pattern. Overall, 20,889 of 27,499 students in grades 3 through 5 tested proficient. Higher percentages of WCPSS students met grade level standards than was true across the state (76% in WCPSS and 66% statewide).

**Figure 42**  
**EOG Mathematics Results, Spring 2006, Grades 3–5**

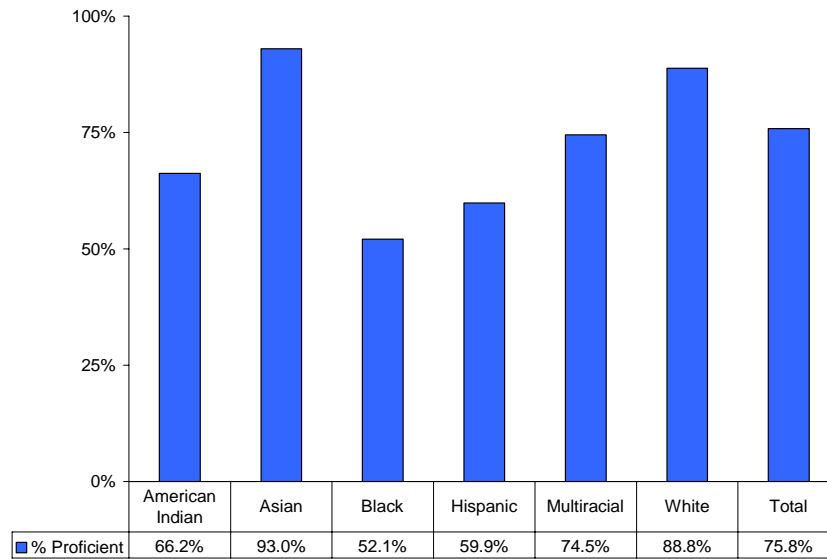


Note: Number tested was 9,435 for grade 3; 8,999 for grade 4; and 9,065 for grade 5.

### By ethnicity in 2005-06:

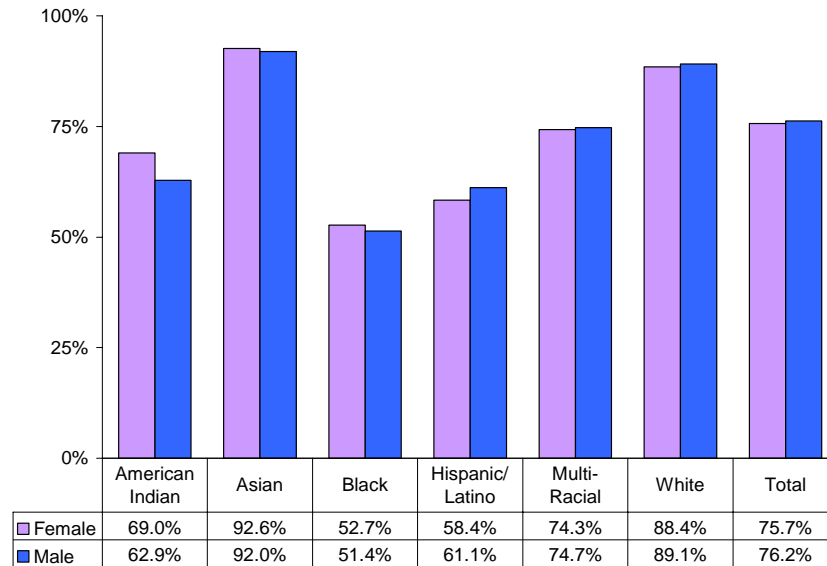
- The percent proficient varied from 52% to 92% for ethnic subgroups, with the highest percentages proficient among Asian and White students, and the lowest among Black/African American and Hispanic/Latino students (see Figure 43).
- The achievement gap between Black/African American and White students was 27 percentage points.
- No consistent pattern of gender differences was evident within ethnicity (see the Figure 44).
- 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 (see Figures 45 and 46).
- FRL, SWD, and LEP students all showed proficiency rates around 50% (49.9% to 53.2%). As shown in Figure 45, 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. Only one third of students who were SWD and FRL or SWD, FRL, and LEP scored at proficient levels.

**Figure 43**  
**EOG Mathematics Results by Ethnicity, Spring 2006, Grades 3-5**



Note: Number tested was 77 for American Indian, 1,400 for Asian, 7,066 for Black/African American, 2,758 for Hispanic/Latino, 1,134 for Multiracial, 15,064 for White, and 27,499 for Total.

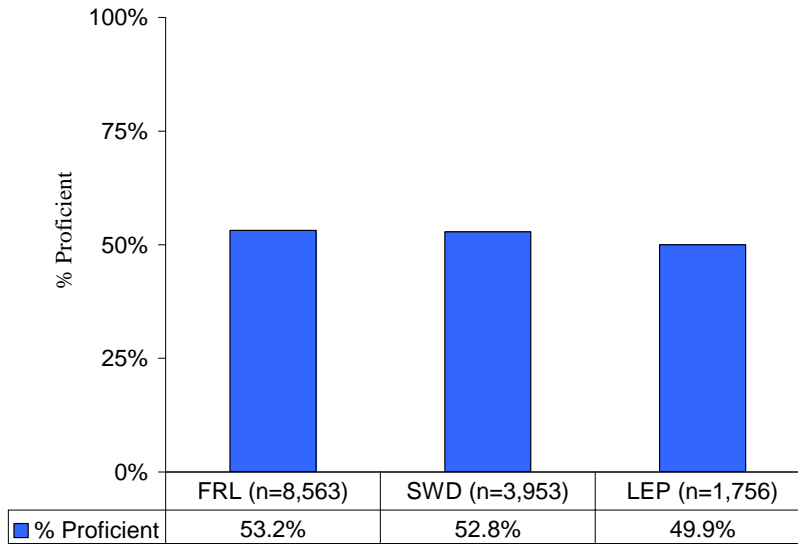
**Figure 44**  
**EOG Mathematics by Ethnicity and Gender, Spring 2006, Grades 3-5**



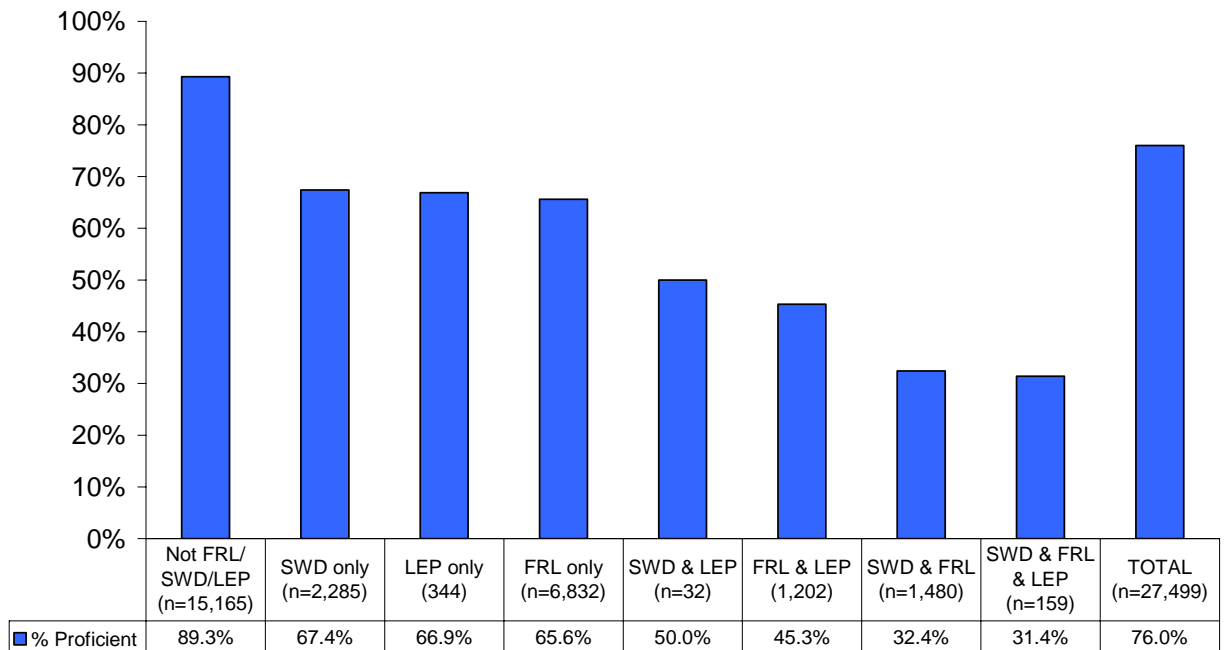
**Table 22**  
**Numbers of Students Tested in Mathematics EOG, Spring 2006, Grades 3-5**

	American Indian	Asian	Black	Hispanic/Latino	Multiracial	White	Total
Female	42	703	3,496	1,384	556	7,315	13,496
Male	35	697	3,570	1,374	578	7,749	14,003

**Figure 45**  
**EOG Multiple-Choice Mathematics Results by Academic Risk Factors, Spring 2006, Grades 3-5**



**Figure 46**  
**EOG Multiple-Choice Mathematics Results by Academic Risk Subgroup Combinations, Spring 2006, Grades 3-5**



Note: Unduplicated counts.

## OTHER STUDENT OUTCOMES

### PROMOTION/RETENTION 2005-06

#### 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 in order to be promoted each year. Additionally, the State Board of Education (SBE) Student Accountability Standards policy requires students in grades 3, 5, and 8 to demonstrate grade-level proficiency on the state End-of-Grade (EOG) tests in reading and mathematics. Because multiple-choice tests are not used in grades K-2, student progress in grades K-2 is regularly assessed based on guidelines developed by WCPSS's Instructional Services staff. Course grades are also used to assess grade-level competency in English/language arts and mathematics, with middle school students required to earn a passing course grade in English/language arts, mathematics, either social studies or science, and a minimum of 50% of remaining courses taken. 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 (<http://www.wcpss.net/promotion-intervention>) and in WCPSS Board Policy 5530.

In 2005-06, due to a delay in the reporting of the math EOG scores based on the new test and curriculum, promotion/retention decisions were not based on student performance on the math EOG.<sup>1</sup> The state allows districts to consider a test score within one standard error of measurement as proficient, but WCPSS has not done so to date. As has been mentioned, the new math standards are considerably more difficult than such standards were in the past. The number of students considered for retention, and ultimately retained, may rise at grades 3 through 8 due to the more rigorous standards in the future.

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). Additional information on the courses required for promotion can be found on the WCPSS Web site ([www.wcpss.net/curriculum-instruction/docs\\_downloads/planning-guides](http://www.wcpss.net/curriculum-instruction/docs_downloads/planning-guides)).

#### Overall Retention Rates

At the end of the 2005-06 school year, students were identified by schools as promoted, graduated, or retained, and this information was 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, 96% of WCPSS' students K-12 were promoted, in 2005-06, while 4% were retained (4,876 students). Thus, 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.

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<sup>1</sup> Further information on the other key components of the WCPSS Promotion and Intervention Policy can be found in our report *Promotion/Retention of Students in Grades K-8 2000-01* (Report No. 02.08).

## Grade Level

The following table displays the promotion and retention rates of WCPSS students by grade level. While all grade levels had high promotion rates, ranging from 85% to 99%, there were distinct differences among grade levels.

- The two highest retention rates were at the high school levels. By grade, 9<sup>th</sup>-grade students had the highest rate of retention (15%), followed by grade 10 (9%).
- Kindergarten, grade 1, and grade 11 had the next highest rate of retention (5%).
- The middle school grades had the lowest retention rate, with just over one percent of students retained at each grade.

**Table 23**  
**Promotion/Retention, 2005-06, Grades K - 12**

Grade	Number Retained	Percent Retained	Number Promoted	Percent Promoted	Total
<b>KI</b>	513	4.8%	10,206	95.2%	10,719
<b>1</b>	495	4.8%	9,881	95.2%	10,376
<b>2</b>	278	2.8%	9,780	97.2%	10,058
<b>3</b>	134	1.4%	9,636	98.6%	9,770
<b>4</b>	80	0.9%	9,215	99.1%	9,295
<b>5</b>	49	0.5%	9,286	99.5%	9,335
<b>6</b>	125	1.3%	9,223	98.7%	9,348
<b>7</b>	127	1.4%	9,303	98.7%	9,430
<b>8</b>	135	1.5%	9,093	98.5%	9,228
<b>9</b>	1,489	15.0%	8,473	85.1%	9,962
<b>10</b>	756	8.9%	7,733	91.1%	8,489
<b>11</b>	402	5.3%	7,240	94.7%	7,642
<b>12</b>	293	4.1%	6,790	95.9%	7,083
<b>Total</b>	4,876	4.0%	115,859	96.0%	120,735

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 school year.

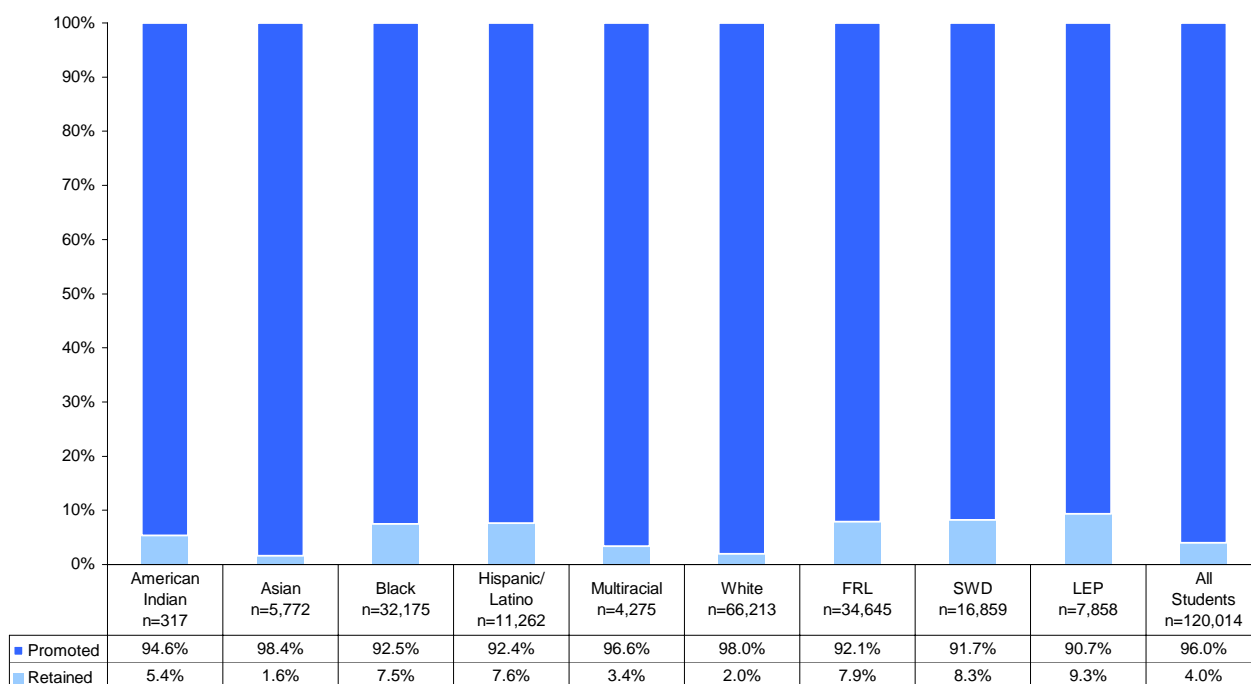
The higher rate of retention at grades 9 and 10 probably reflects the different criteria used to determine promotion to the next grade at the high school level. As noted earlier, high school promotion/retention decisions are based on successful completion of specific required courses and not on the principal to make the final promotion decision, as in the lower grade levels. 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 in 2005-06 (see Figure 47). Remember that many students are represented in more than one subgroup and that the overall promotion rate in WCPSS was 96%.

- LEP students had the highest rate of retention (9%), as compared to non-LEP students (4%).
- SWD and FRL students also had higher retention rates (about 8%) than other subgroups.
- Among racial groups, Black/African American and Hispanic/Latino students had the highest rate of retention (approximately 8%).

**Figure 47**  
**Promotion/Retention by NCLB Groups, 2005-06, Grades K-12**



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 school year.

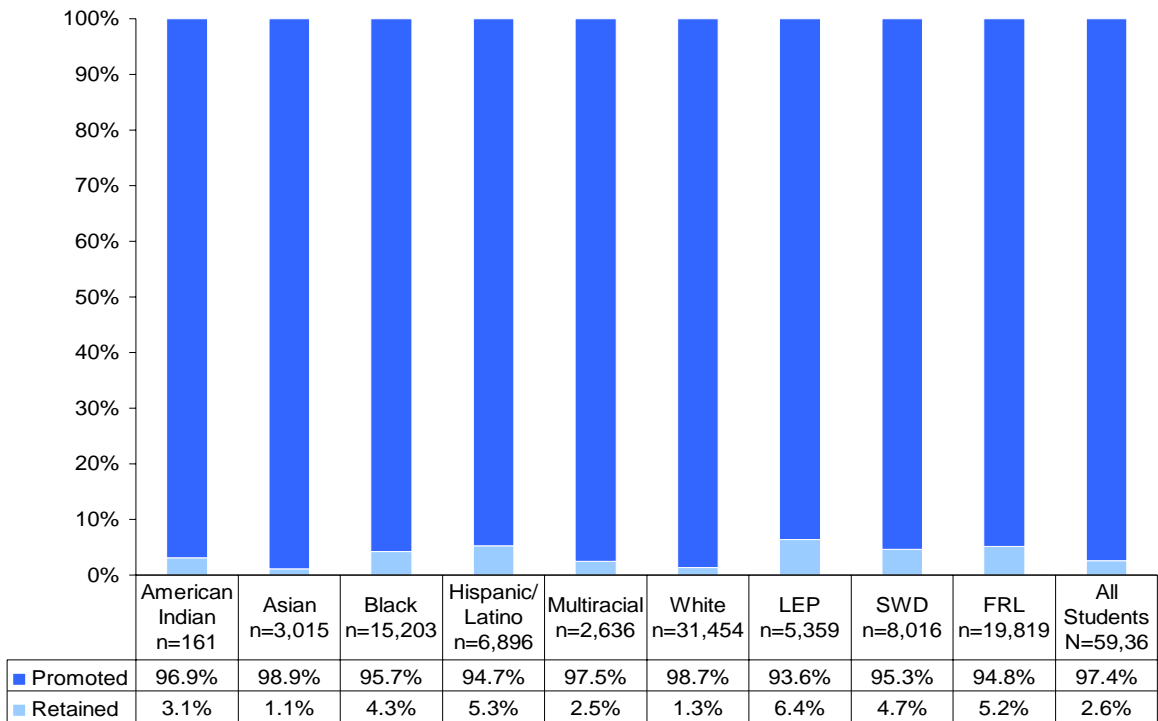
Note: Ethnic counts are unduplicated, but other counts are duplicated.

Note 2: 721 students were missing subgroup information

As the following figure shows, for grades K-5:

- The patterns of students retained by subgroup at the elementary level were consistent with the overall (K-12) results.
- At the elementary level, the percentage of students retained was lower than the retention rates K-12.

**Figure 48**  
**Promotion/Retention by NCLB Groups, 2005-06, Grades K-5**



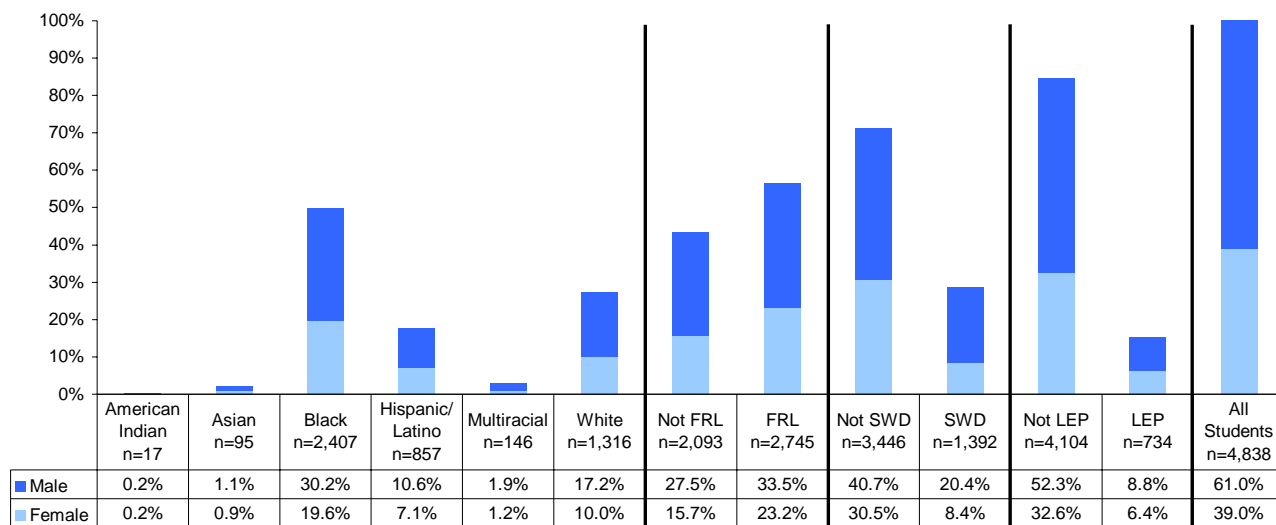
## Characteristics of Retained Students

### Subgroups and Gender

Another way to examine retention is the characteristics of only those who are retained. The next figure displays the percentage of those retained at the end of 2005-06 by gender within subgroups. Each section of the graph totals the number of all students retained. Overall, a higher percentage of retained students were male (61%) than female (39%). This pattern is repeated across all NCLB groups with the exception of American Indian students. The proportion of retained students is not equally distributed across NCLB groups.

- By ethnicity, Black/African American students represent the highest percentage of retained students (at approximately 50%). White students represent the second highest percentage (27%). Black/African American students are over-represented and White students under-represented relative to the percentage of the population each represents (27% and 55%, respectively).
- LEP students represent about 15% of those retained, with SWD students representing 28%. This illustrates the importance of group size and perspective when examining retention. Because there are fewer WCPSS students who are categorized as LEP or SWD than other groups, they represent smaller percentages relative to all those retained while having a higher rate of retention within their student group.
- FRL students constitute a higher percentage of retained students (57%) than students who do not receive free or reduced-priced lunch (43%). FRL students are over-represented among retainees relative to the percentage of the population they represent (29%).

**Figure 49**  
**Students Retained by Gender and NCLB Groups, at the End of 2005-06, Grades K-12**



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 school year.

Note: Bold lines indicate student groups that total to 100%. Counts are unduplicated within each section, but not across sections.

Note 2: 38 students are missing LEP and FRL status and are not included in this figure.

The pattern of retention rates remained the same among NCLB subgroups at the elementary, middle and high school levels. At the middle school level, percentages of retained students who were Hispanic/Latino or LEP were lower than at the elementary and high school levels. Although in the overall middle school population there are fewer Hispanic/Latino and LEP students than at the elementary school level, these groups represent a higher percentage of the middle school population than at the high school level.

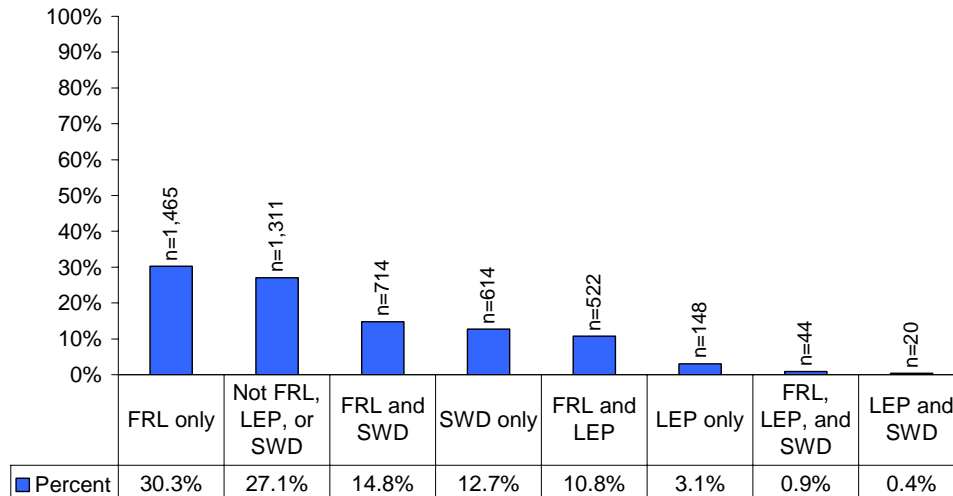
### *Academic Risk-Factor Combinations*

The following figure displays students retained at the end of 2005-06 for all possible combinations of FRL, SWD, and LEP students. Each student is represented in only one category.

- Across K-12, more than half of those retained were FRL. Close to 75% were FRL, SWD, or LEP. About one third (30%) were only FRL. Students who were FRL and SWD represented the most common combination of academic risk factors.
- 16% of those retained were LEP or SWD but not FRL.
- 27% of retained students did not fall into the FRL, SWD, or LEP academic risk categories.
- The patterns of students retained by subgroup at the elementary, middle, and high school levels were consistent with the overall K-12 results.
- One difference from the K-12 results was that at the elementary school level, FRL and LEP represented the most common combination of academic risk categories followed by FRL and SWD, 18% and 11% respectively (not shown).

The percentages of students retained within academic risk subgroups was approximately twice as high as WCPSS overall. Students with FRL, LEP, or SWD status as well as Black and Hispanic students were over-represented among retained students relative to their percentage of the population. Within all subgroups, with the exception of American Indian students, male students were retained at a higher rate than female students.

**Figure 50**  
**Students Retained by Risk-Group Combinations, at the End of 2005-06, Grades K-12**



N = 4,838

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 school year.

Note: 38 students are missing LEP and FRL status and are not included in this figure.

## COGNITIVE ABILITIES TEST (CogAT) 2005-06

### 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 used CogAT, along with the Iowa Test of Basic Skills (ITBS), as part of the identification process for the Academically Gifted Program. Because all 3<sup>rd</sup>-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.

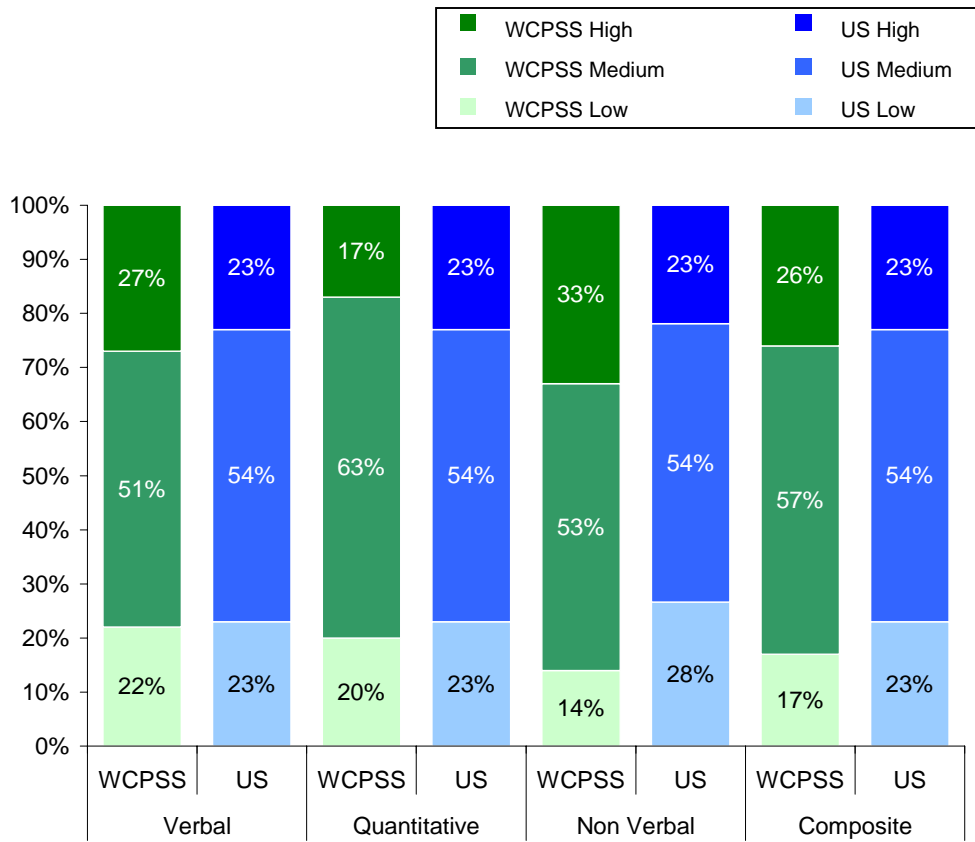
- The Verbal Battery consists of verbal classification, sentence completion, and verbal analogies. This battery appraises flexibility, fluency, and adaptability in working with verbal material and solving verbal problems.
- The Quantitative Battery consists of quantitative relations, number series, and 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.

Compared to 3<sup>rd</sup>-grade students across the nation, the typical WCPSS student scored higher than 57% of 3<sup>rd</sup>-grade students in the nation (a median percentile of 57). Thus, the WCPSS population is just slightly above the national norm in the abilities measured by the CogAT. Scores of the nonverbal (median percentile of 62) and verbal scales (median percentile of 55) were stronger than on the quantitative section (49). 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 math ability. Nonverbal scores were actually the strongest, and this reasoning test likely relates most strongly to math.

WCPSS had similar percentages in the high and medium ranges of scores and smaller percentages scoring in the low ranges on the CogAT. 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 are the lowest 23% of those tested.
- **Medium:** Stanine 4-6 represent just below to just above average scores; this represents 54% of the scores.
- **High:** Stanine 7-9 represents students scoring considerably above average; scores are the top 23% of those tested.

**Figure 51**  
**Overall Results on CogAT, 2005-06, Grade 3**



CogAT results suggest that WCPSS students, as of 3<sup>rd</sup> grade, could be expected to score at or just above national norms, based on student ability.

## ACCOUNTABILITY OUTCOMES

### ABCs RESULTS

The ABCs of Public Education Accountability model for elementary and middle schools was first implemented in the 1996-97 school year. It has always included both a performance component and a growth component, but changes have been made to the model over time. (For more information, visit DPI's Web site: [www.ncpublicschools.org](http://www.ncpublicschools.org).) Although ABCs results still represent the extent to which WCPSS schools are meeting state standards, extreme caution must be taken when comparing the results across years. Results for 2005-06 will therefore be emphasized as a baseline for the coming years.

- The performance component addresses the percentage of test scores at or above grade level (Levels III or IV), and it includes all students tested (including alternate assessments). Reading and mathematics were the only subjects included the last two years. In 2005-06, writing was added back into the calculations, and mathematics standards were revised.
- The growth component deals with students' scores from one year to the next, and includes only students with both scores in a subject. Students must have attended the same school for 140 days or more. The method of computing this standard changed in 2005-06.

Based on these two standards, plus the federal Adequate Yearly Progress (AYP) standards, the state has created various recognition categories for schools. Because mathematics standards were designed to be more rigorous and difficult to meet, a decrease in the percentage of schools qualifying for recognitions is not unexpected.

### ABCs Growth Standards

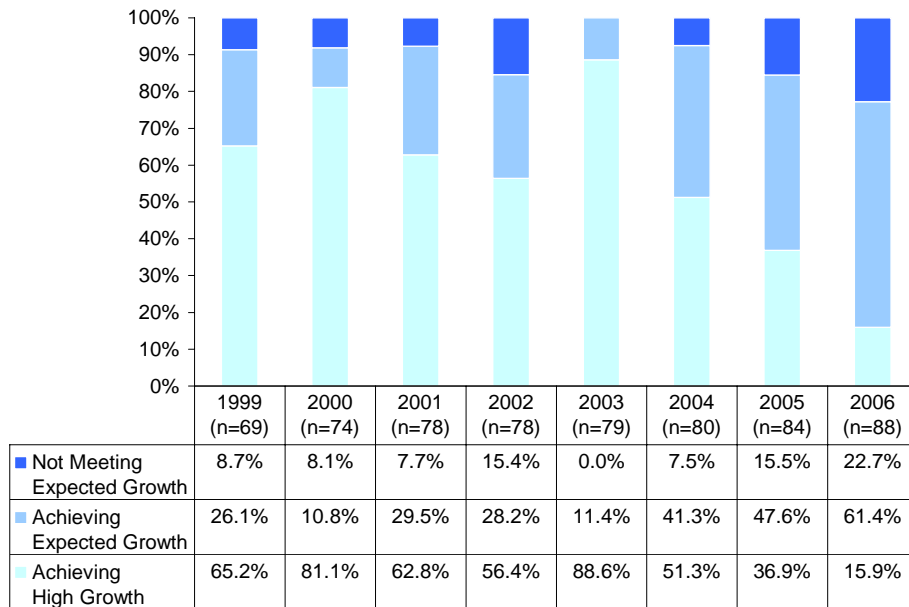
A completely new method of computing growth was introduced in 2005-06. While the terms Expected and High Growth continue to be used, the definition has changed for both. The basic assumption of the *new* ABCs growth component is that a student should be expected to do at least as well on various EOG tests as s/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 tests.

The average growth across all of these indicators has to be greater or equal to 0 (Total Average Actual Score minus Total Average Predicted Score) for the school to meet the Expected Growth Standard. In order to meet the High Growth Standard, first a school has to meet the Expected Growth Standard. Second, at least 60% of the students in the high-growth school have to meet or exceed their individual growth targets on their EOG tests.

Results for spring of 1999 through spring of 2006 are shown in the following figure.

- Most WCPSS elementary schools have met Expected or High Growth standards every year the ABCs has been in effect.
- 77% of elementary schools (68 of 88) met Expected or High Growth in spring of 2006 in WCPSS, a drop of 7 percentage points from spring 2005. Conversely, the percentage of schools not meeting Expected Growth standards increased in 2005-06 to 23%, compared to 18% in spring of 2005.
- 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 has been declining since spring of 2003. With the new standards, only 14 of the 88 elementary schools (16%) met this standard.

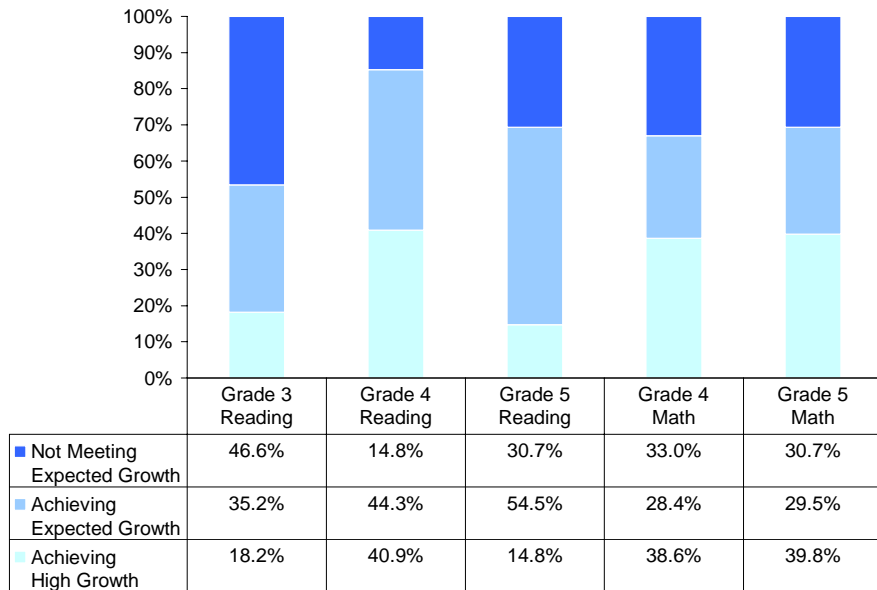
**Figure 52**  
**ABCs Growth Summary, WCPSS Over Time, Grades 3-5**



When examined by grade:

- Schools had the most difficult time meeting the third grade standards in reading: Fifty-three percent of schools met their Expected or High Growth standards for grade 3, 85% for grade 4, and 69% for grade 5.
- The lowest number and percentage of elementary schools met High Growth in reading at grades 3 and 5.
- Compared to reading, mathematics results were more similar across grades. Growth was not computed for grade 3 mathematics in 2006, because no pretest for mathematics was administered in the 2005-06 school year. About the same percentage of schools met Expected or High Growth for mathematics in grade 4 and 5 (67% and 69% respectively).

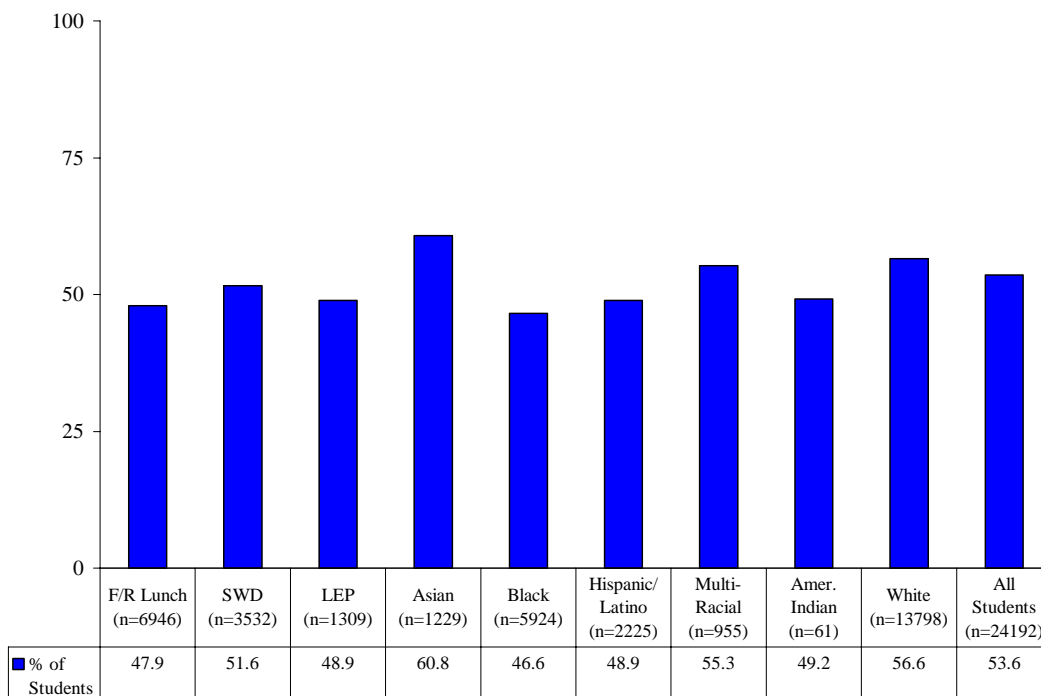
**Figure 53**  
**Percentage of WCPSS Students Meeting Growth Target by Subject**  
**Grades 3-5, 2005-06**



As the following figure demonstrates, the overall percentage of WCPSS students reaching their growth target for ABCs in reading was 54%. Most groups did not meet high growth.

- The percentage of each group meeting their growth target varied from 47% to 61%.
- The highest percentage of students meeting their growth targets was found for Asian and White students (61% and 57%, respectively). The lowest percentage of students meeting their growth targets was evident for Black/African American and FRL students (51 and 53%, respectively).

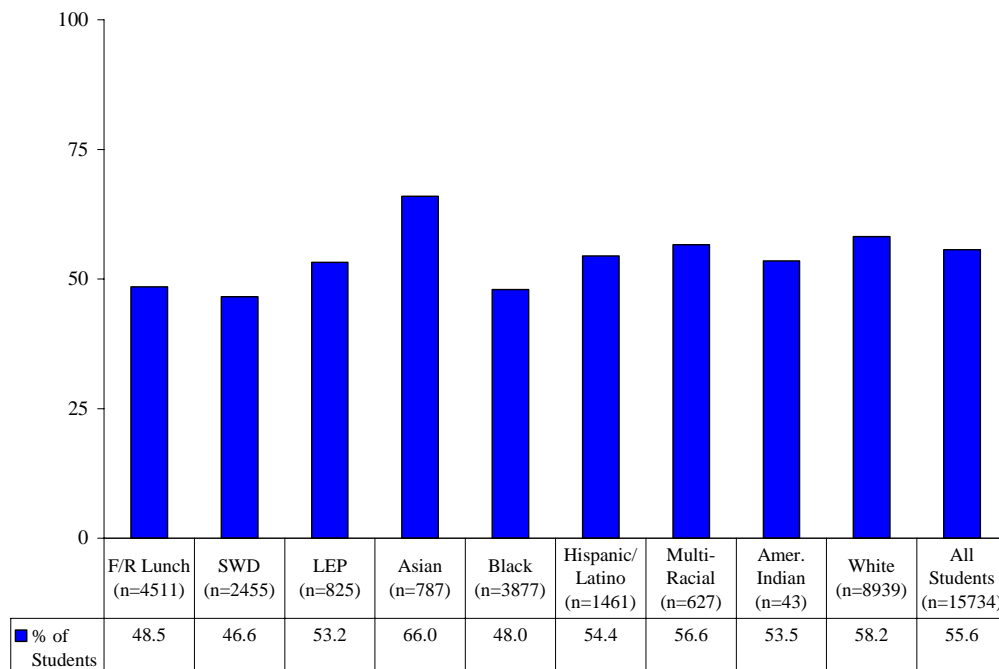
**Figure 54**  
**Percentage of Students by NCLB Subgroups Meeting Growth Targets in Reading**  
**Grades 3-5, 2005-06**



As the following figure demonstrates, the overall percentage of WCPSS students reaching their growth target for ABCs in mathematics was 56%. Most groups did not meet high growth.

- The percentage of each group meeting their growth target varied from 47% to 66% (a wider range than was true in reading).
- The highest percentage of students meeting their growth targets was found for Asian and White students (66% and 58%, respectively). The lowest percentage of students meeting their growth targets was evident for FRL, SWD, and Black/African American students (47-49%).

**Figure 55**  
**Percentage of WCPSS Students Meeting Growth Targets in Mathematics**  
**by NCLB Subgroups, Grades 3-5, 2005-06**



**ABCs Performance Standards**

The second component of the ABCs of Public Education Accountability model is the performance component. Performance is based on the percentage of scores, across subjects, which are at grade level (Levels III and IV). Reading, mathematics, and writing scores were included in 2005-06. Mathematics standards were more difficult to meet than in past years and writing had not been included for several years. The percentage of students scoring proficient in writing was lower than in reading. Definitions of these levels are described in the Testing Outcomes (EOG) section of this report.

**ABCs Recognitions and Awards**

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 specific percentage of their test scores fall into the Level III or Level IV range. Some awards also incorporate meeting the federal AYP standards. The next table provides the definitions for each of the recognition categories the state applies to schools under this accountability program.

**Table 24**  
**ABCs Awards and Recognitions 2005-06**

<b>Recognition Category</b>	<b># Elem. Schools (N=88)</b>
<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.	14
<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.	54
<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.	7
<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.	31
<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.	19
<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

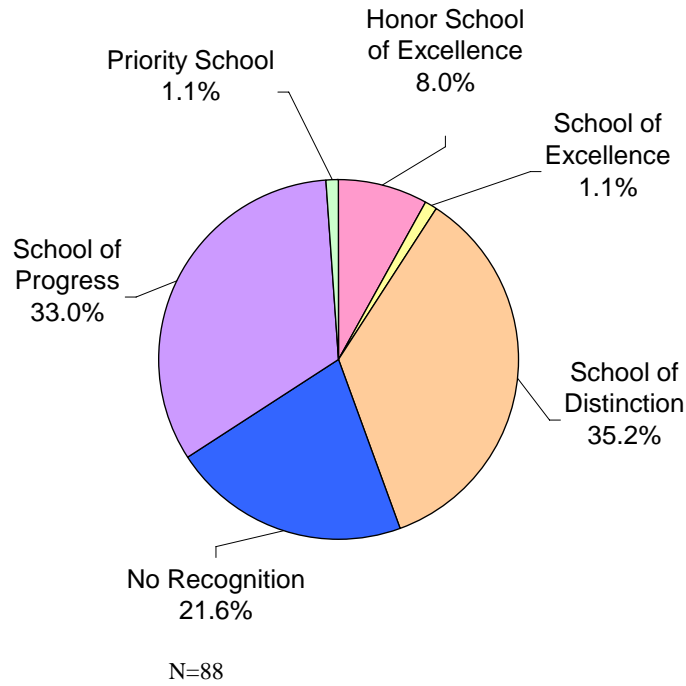
Note: Adapted from <http://www.ncpublicschools.org/docs/accountability/reporting/abc/2005-06/execsumm.html>. Schools may be counted in top section above the shaded row as well as bottom section. n=88

With the changes in both the growth component and the performance component in math, fewer WCPSS schools met the standards for these recognitions in 2005-06 than in previous years. This was the trend statewide as well.

- In 2003, 2004, and 2005, respectively, 40, 52, and 49 WCPSS elementary schools earned the performance recognitions of School of Excellence or Honor School of Excellence. In 2006, only eight elementary schools (9%) met these standards (compared to 58% in 2005).

- *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.
- *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).

**Figure 56**  
**Percentage of WCPSS Elementary Schools by ABCs Designation, 2005-06**



## AYP RESULTS

Adequate Yearly Progress (AYP) is a series of targets that schools, school districts, and states must meet each year to fulfill the requirements of the federal Elementary and Secondary Education Act (also referred to as the No Child Left Behind Act of 2001). The ultimate goal is for 100% of students to score proficient in reading and mathematics by 2013-14. In North Carolina, the primary measures used are EOG tests for grades 3-8.

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

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

- 95% participation rate in the school's appropriate reading assessment
- 95% participation rate in the school's appropriate mathematics assessment
- Proficiency target in reading (77% in grades 3-8; 35% in grade 10 as of 2005-06)
- Proficiency target in mathematics (65.8% in grades 3-8; 70.8% in grade 10 based on Algebra I as of 2005-06)

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 12<sup>th</sup> 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 is tied into 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 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 three Title I schools have been sanctioned under NCLB. (See DPI's Web site for more information on NCLB and AYP in NC public schools: <http://www.ncpublicschools.org/nclb> .)

For AYP proficiency (i.e., passing rate) calculations 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 days in membership.) 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 percent 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.

### **AYP Elementary School Results**

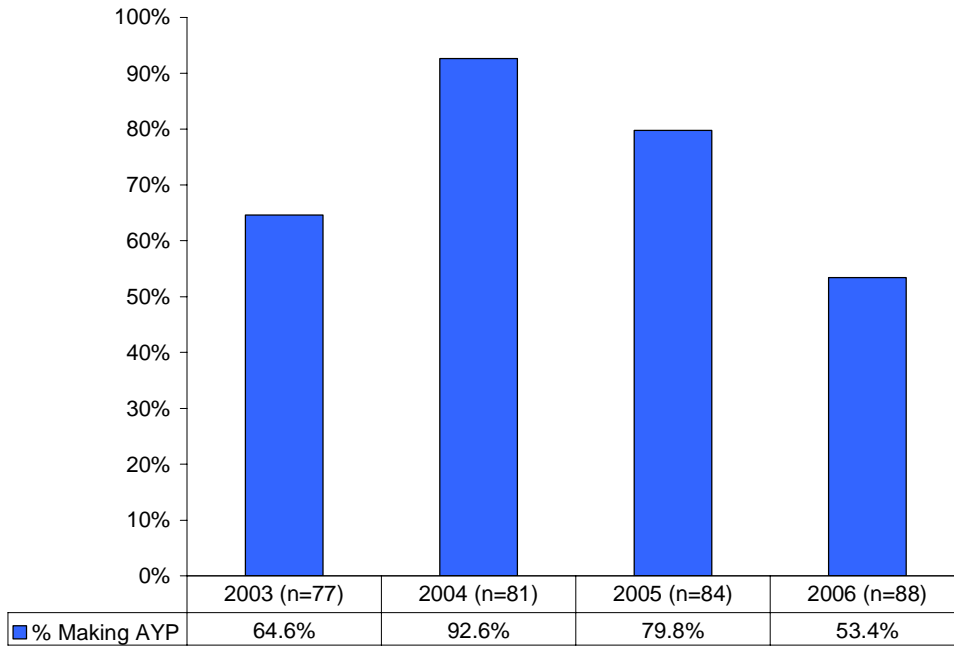
Changes in mathematics standards made AYP more difficult to reach this year, even though the targets were adjusted downward somewhat by the NC DPI (see the following figure). WCPSS’ mathematics 3-8 EOG composite proficiency fell from 92% in 2004-2005 to 76% in 2005-2006. This was a drop of 17 percentage points. The mathematics 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. Slightly more than half of WCPSS elementary schools met AYP by meeting all of their targets.

### **Overall Elementary School Results**

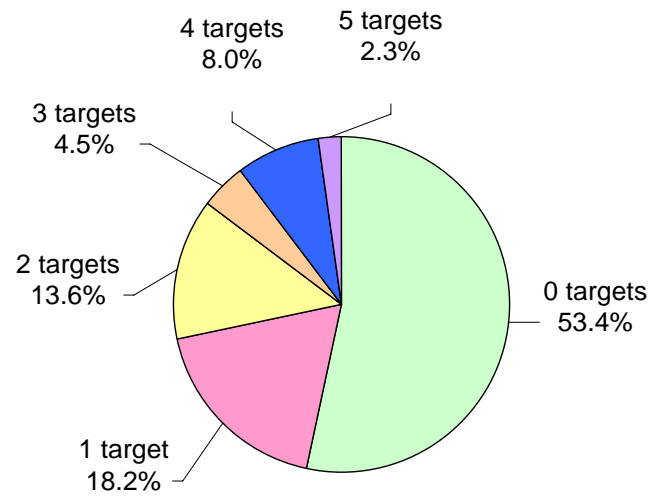
Fewer elementary schools met AYP in 2005-06 than in previous years.

- Overall, 53% (47 of 88) elementary schools made AYP by meeting all of their targets compared to 80% in 2004-05 (see Figure 57).
- Another 32% of schools missed only 1 or 2 targets. However, 15% missed 3-5 targets. (see Figure 58).
- Mathematics targets were more likely to be missed in 2005-06 for the first time. The subgroups most likely to miss targets were SWD and FRL (see Figure 59).
- Schools with fewer targets were more likely to meet AYP standards. All schools with 15 or fewer targets made AYP (see Figure 59).

**Figure 57**  
**Schools Making AYP, Spring 2003–2006, Grades 3-5**

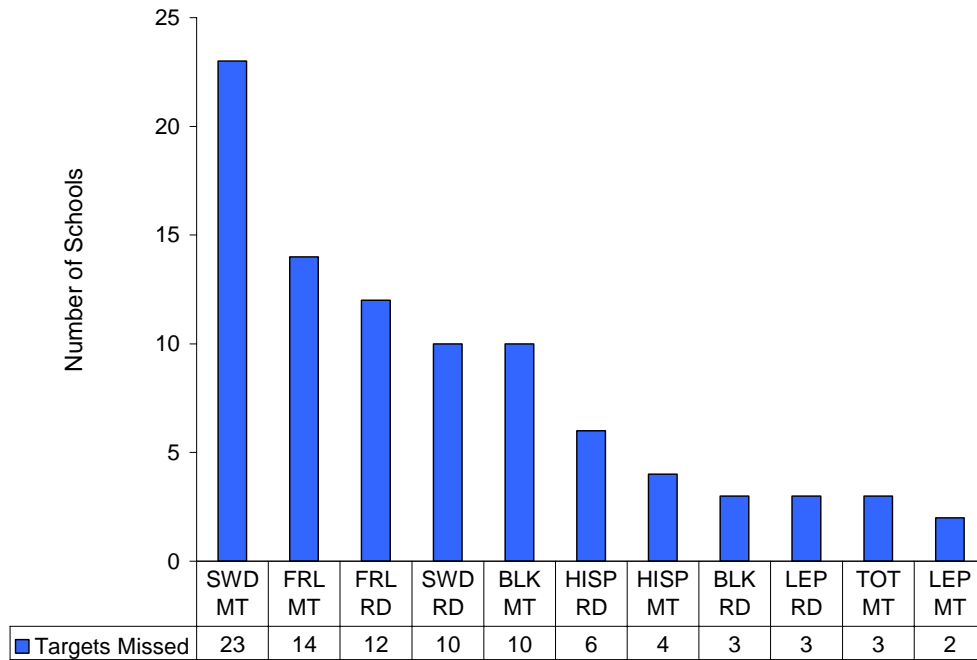


**Figure 58**  
**AYP Targets Met/ Missed, 2005-06, Grades 3-5**



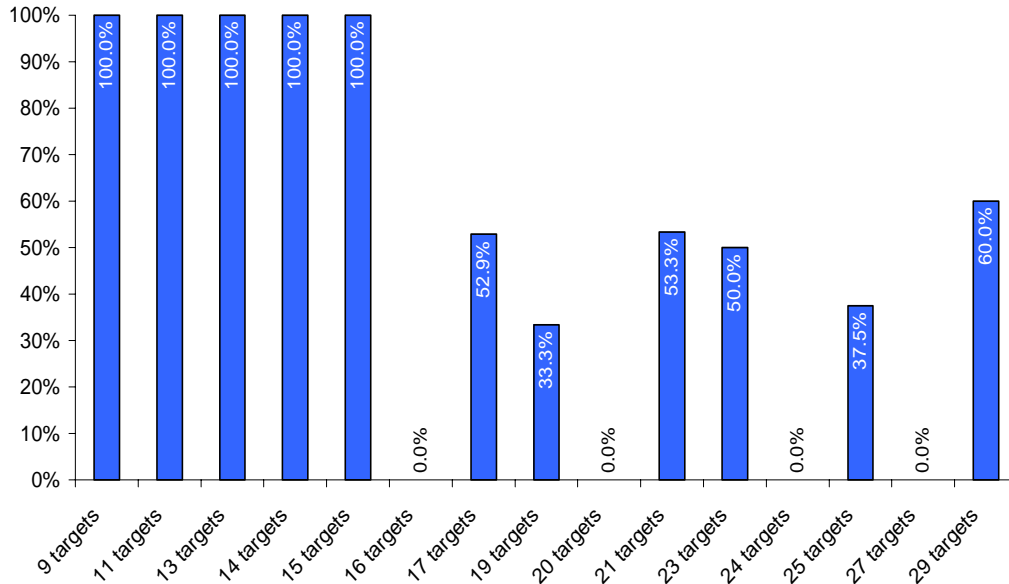
N=88  
 Note: 0 targets = made AYP

**Figure 59**  
**Number of Targets Missed by Subgroup, 2005-06, Grades 3-5**



Note: MT = Math; RD = Reading    Note: Total targets missed was 90.

**Figure 60**  
**Schools Making AYP by Number of Targets, 2005-06, Grades 3–5**



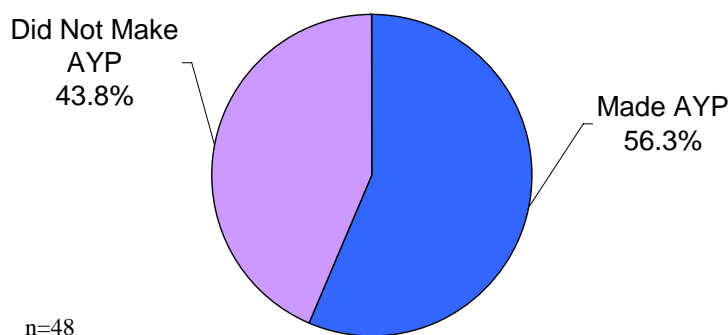
No. targets	9	11	13	14	15	16	17	19	20	21	23	24	25	27	29
No. schools	1	1	5	1	4	1	17	3	2	30	6	1	8	3	5

## Title I Results

Within the Title I schools:

- Similar to the pattern for all elementary schools, 27 out of 48 (56%) met AYP standards (see following figure).
- Of the 21 Title I schools that missed AYP, 12 only missed mathematics targets, 2 only reading targets, and 7 missed both reading and mathematics targets.
- The two WCPSS schools in school improvement last year, Hodge Road and Lynn Road elementary schools, both met all of their AYP targets for 2005-06. By meeting their AYP targets for two consecutive years, Lynn Road is no longer identified for school improvement. Hodge Road needs to make AYP again in 2006-07 to exit school improvement.
- One additional WCPSS Title I school, Powell Elementary, has been identified for school improvement based on the 2005-06 AYP results.

**Figure 61**  
**Title I Schools by AYP Status, 2005-06, Grades 3-5**



## System Results

Across the elementary, middle, and high school levels, despite meeting over 90% of the targets, WCPSS entered systemwide improvement because reading targets were missed in all of three levels (3-8, 6-8, and 10) for two consecutive years (2004-2005 and 2005-2006). Students who transfer within the district and have fewer than 140 days in any one school will not be included in any school AYP report but will be in the district report. Thus, the district is held accountable for more students than the total of students in individual schools. The reading targets were missed with SWD and LEP subgroups.

## EFFECTIVE PRACTICES

The previous sections show the successes of WCPSS as well as the continuing needs. This section provides a brief overview of recent E&R studies, which address practices to promote students' achievement. We begin with a definition of Professional Learning Communities, a promising national practice, with links to effective schools research. We then summarize key findings from studies E&R has conducted that address ways to promote achievement. References are provided to full reports posted on E&R's Web page. The text boxes highlight key factors found in national effective schools research that are highlighted in each study. In the case of the NCLB study, problems to avoid are highlighted.

### PROFESSIONAL LEARNING COMMUNITY DEFINITION

*PLCs are one way to build collaboration among school faculties, which can lead to improved school outcomes for students (Reichstetter, 2006).*

WCPSS is searching for ways to hold higher expectations for students, improve instructional practices, and increase student learning and achievement outcomes. One of the WCPSS superintendent's four strategic directives focuses on teaching and learning, and professional learning communities (PLCs) are being stressed as a method to promote improvement. PLCs could support the following practices that are related to effective schools and successful improvement initiatives:

- indicators of a productive school culture
  - tendency toward student-centered instruction, high expectations for students, and focus on improvement
  - work behavior that centers on collaboration
  - professional productivity
 (Georgiades et al., as cited in DuFour & Eaker, 1998, pp. 70-71)
  
- characteristics of effective schools
  - safe and orderly environment of cooperation and respect that is purposeful and businesslike
  - climate of high expectations for success incorporating a variety of instructional strategies
  - communicative and widely dispersed instructional leadership
  - clear and focused mission, responsive to student needs
  - opportunity to learn and student time on relevant and valued tasks
  - student progress frequently monitored through a variety of evaluation measures
  - trusting and communicative home-school relations
 (Lezotte, as cited in DuFour & Eaker, 1998, pp. 71-72)

- High Expectations and Positive Attitudes
- Challenging Learning Experiences for All Students
- Supportive Leadership
- Collaboration
- Effective Use of Data
- Curriculum and Resources

WCPSS is emphasizing the development and implementation of PLCs. Schools are at various stages of implementation. The first step has been to gain a clear understanding of the characteristics, elements, and attributes of PLCs. A recent review of the literature by the

WCPSS Evaluation and Research Department focused on defining the term *professional learning community* (Reichstetter, 2006). Through principals' meetings and discussions, a systemwide definition was agreed upon by using the review as a guide:

A professional learning community is made up of team members who regularly collaborate toward continued improvement in meeting learner needs through a shared curricular-focused vision. Facilitating this effort are:

- supportive leadership and structural conditions,
- collective challenging, questioning, and reflecting on team-designed lessons and instructional practices/experiences, and
- team decisions on essential learning outcomes and intervention/enrichment activities based on results of common formative student assessments.

E&R will be monitoring school status in terms of implementation of PLCs.

## PROJECT ACHIEVE

*Project Achieve has been an effective practice in WCPSS; it has shown a positive impact on academic performance in participating schools, particularly schools with the lowest initial percentage of students at grade level on EOG (Baenen, Carpenter, and Dudley, 2006; Lezotte, and Jacoby, 1990).*

Project Achieve began in the 2001-02 school year to help schools reach the WCPSS goal of having 95% of students score at or above grade level as measured by the State of North Carolina EOG tests. This instructional initiative is based on quality management principles and processes as applied in Brazosport, Texas. This nationally recognized model led to substantial narrowing of achievement gaps by ethnicity. WCPSS tailored the approach to meet local needs and the *North Carolina Standard Course of Study*. The eight basic steps of the model (based on Baldrige approaches and quality tools) represent a cyclical process:

- 1) *Disaggregating test scores* to identify weak and strong areas of performance
- 2) *Developing a pacing calendar* for instruction
- 3) *Delivering instructional focus lessons* (designed to last 15-20 minutes)
- 4) *Assessing student mastery* of the focus lessons through mini-assessments
- 5) *Refocusing instruction* for students in areas of nonmastery
- 6) *Enriching instruction* for students in areas of mastery
- 7) *Maintaining and re-teaching throughout the year* to ensure continued mastery
- 8) *Continuously monitoring the process.*

- |                                     |   |
|-------------------------------------|---|
| <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                          |

The process entails restructuring of the school day for (a) uninterrupted blocks of instructional time in reading and mathematics and (b) a separate 30-to-45-minute period called “team time” for re-focusing or enrichment of targeted instructional objectives with students based on assessment results. Teachers also meet periodically to study results and plan. Project Achieve schools found the assessments were useful in informing their instruction, and many other elementary schools in the county have now adopted use of the assessments.

### **Effects of Project Achieve**

The original participants, six elementary schools and two middle schools, were invited to participate based on low past achievement patterns; one school volunteered due to interest in the model. Early results were quite promising, and the program grew from eight to 25 schools between 2001-02 and 2005-06. Newer schools added the approach for more varied reasons, including the structure it could provide to new schools with new staff as they built their instructional program.

Key desired outcomes for Project Achieve have been an increase in the percentage of students scoring at or above grade level on the EOG tests and high growth based on the ABCs accountability model. Overall outcomes over time have been very positive. Outcomes for 2005-06 were relatively positive.

In reading, 13 of 17 continuing Project Achieve elementary schools had a higher percentage of students at or above grade level in reading than before entering the project, including all of the original schools. Eleven of 17 had higher reading proficiency in spring 2006 than in 2005. Because the cut scores for math changed for the 2005-06 school year, comparing math results to past years is not informative.

Results for ABCs growth and AYP were similar for the 22 Project Achieve elementary schools and WCPSS overall in 2005-06. Fifteen of 22 participating schools (68%) met the state ABCs Expected Growth standard, and four schools (18%) achieved High Growth. Among WCPSS elementary schools, 68 of 88 schools (77%) achieved Expected Growth and 14 schools (16%) achieved High Growth. Twelve of 22 (55%) Project Achieve schools met AYP, compared to 47 of 88 (53%) of all WCPSS elementary schools.

## 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) End-of-Grade (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 free or reduced-price lunch (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 that 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

## ACADEMICALLY GIFTED (AG) BASICS PROGRAM

*WCPSS AG students show positive achievement regardless of the type of school they attend.*

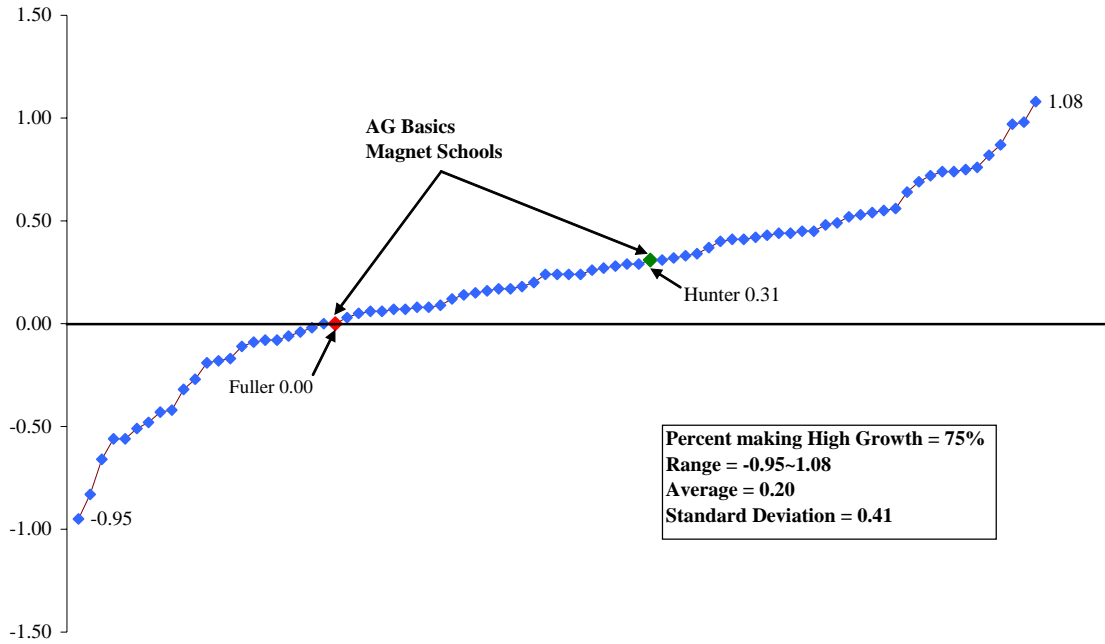
Students are identified for AG status in third grade and provided special services in grades 4 and 5 in all WCPSS elementary schools to promote high academic performance. The way in which this service is delivered varies in some schools.

<input checked="" type="checkbox"/>	Challenging Learning Experiences for All Students
<input checked="" type="checkbox"/>	Curriculum and Resources

- In most schools, AG students receive differentiation in their instruction within their regular classrooms and periodic separate instruction from an AG teacher.
- In the AG Basics Program, offered in conjunction with the Gifted and Talented (GT) Program at Fuller and Hunter magnet elementary schools, the model is somewhat different. The AG students in grades 4 and 5 receive separate instruction for all of their core curriculum classes daily. Students in kindergarten through 3<sup>rd</sup> grade are not formally identified as AG, but are screened for gifted characteristics. Students with gifted characteristics receive some AG services as well, usually through differentiated instruction in their regular classroom, but the services are less structured and more flexible.

The question was raised as to whether AG students in the AG Basics Program had more positive achievement outcomes than those in other schools. Overall, the achievement patterns, both in terms of growth and performance, do not appear to be very different (Rhea and Regan, 2006). The AG Basics Program has been effective in promoting academic achievement among AG students at Fuller and Hunter, but WCPSS AG students' performance overall in reading and mathematics has been strong (regardless of the school). The following figure shows one measure of this pattern based on the high growth composites of AG students attending AG Basics schools versus those in other WCPSS schools. It is important to keep in mind that EOG scores represent only one measure of academic achievement, and thus should not be relied on exclusively to draw conclusions about the quality of instruction in the AG Basics Program.

**Figure 62**  
**High Growth Composites for AG Students**  
**At WCPSS Elementary Schools, 2004-05**



Note: Schools that have a high growth composite of zero (0.00) or greater met high growth

## K-2 LITERACY ASSESSMENTS

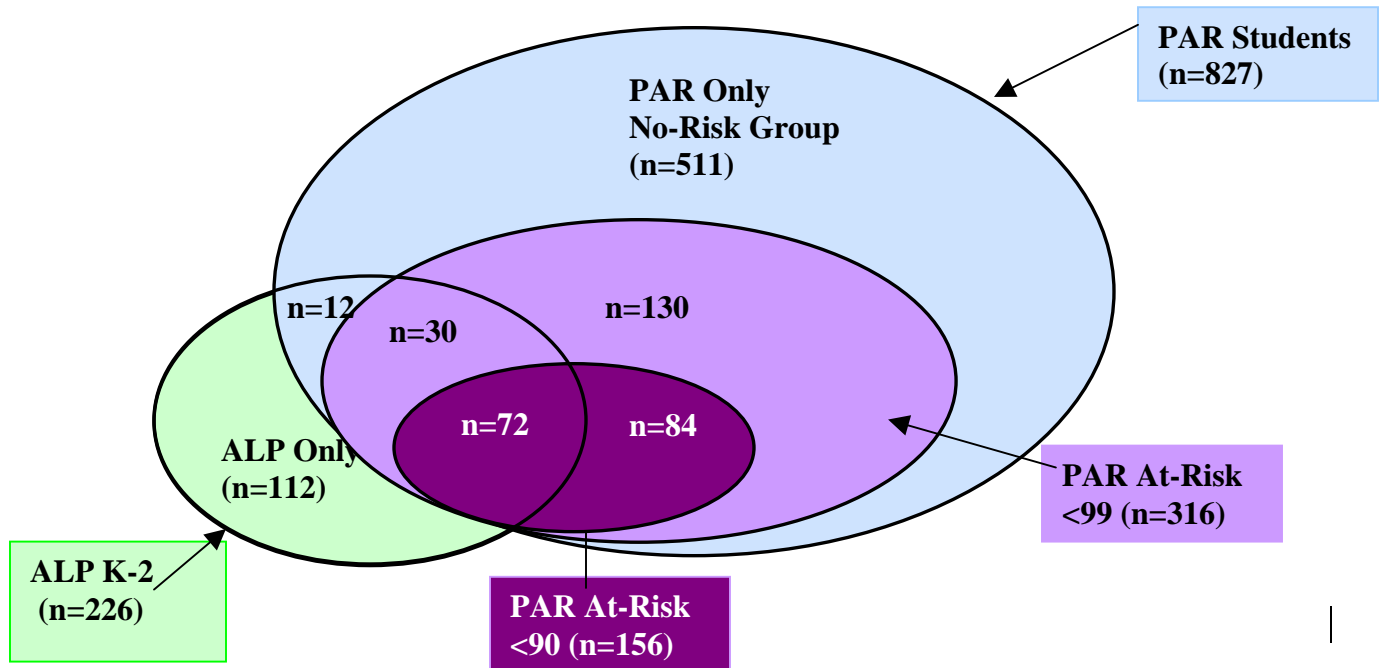
*The K-2 assessments and related multiple criteria used to identify students for assistance identifies many of the same students as the Predictive Assessment of Reading (PAR). However, the nationally normed PAR identified an additional set of students for help that were not identified through K-2 assessments.*

Effective use of data to inform instruction is one of the practices promoted through both effective schools research (Lezotte, Jacoby, 1990) and PLC proponents (Reichstetter, 2006). WCPSS uses K-2 assessments that are in line with state guidelines at K-2. These assessments are not normed. WCPSS had a chance to explore the possible added value of the Predictive Assessment of Reading (PAR) in 2004-05. The PAR is a nationally normed instrument which has been found to predict later achievement in school. PAR was used in addition to the K-2 assessments in WCPSS with a group of first graders as a pilot study. The instruments are quite different; the PAR measures discrete skills while the K-2 assessment measures reading comprehension.



A key question was whether the two instruments identified the same students as in need of literacy support. For those students assessed with both measures, Paepflow (2006) found that nearly all students identified as in need of assistance by the K-2 assessments and other criteria used for the Accelerated Learning Program ALP K-2 were identified as below average on the PAR assessment, with most identified as quite low. However, fewer than half of those identified as quite low on the PAR were served in ALP K-2. Thus, ALP K-2 is not serving approximately 50% of the students identified at greatest academic risk by the PAR assessment.

**Figure 63**  
**Program Overlap of PAR Participants in 2004 and 2005 and**  
**ALP K-2 Students in 2004-05 at PAR Schools, Grades K-2**



Data Source: PAR data provided by Dr. Wood and ALP K-2 2004-05 data

Thus, substantial overlap existed in the students identified as at-risk of school failure, which provides support for the face validity of the K-2 assessments in identifying students in need of literacy support. However, the fact that the PAR identified additional students for help suggests that WCPSS should review assessments currently used and ask whether different or additional assessments would be helpful.

**NCLB SUPPLEMENTAL EDUCATIONAL SERVICES 2005-06**

Providing supplemental services (e.g., tutoring) to students who are struggling academically has been found to be helpful in some studies. NCLB requires schools who fail to achieve Adequate Yearly Progress (AYP) for three consecutive years, to offer supplemental educational services (SES) to all students who received FRL meals, whether they score below grade or above grade level.

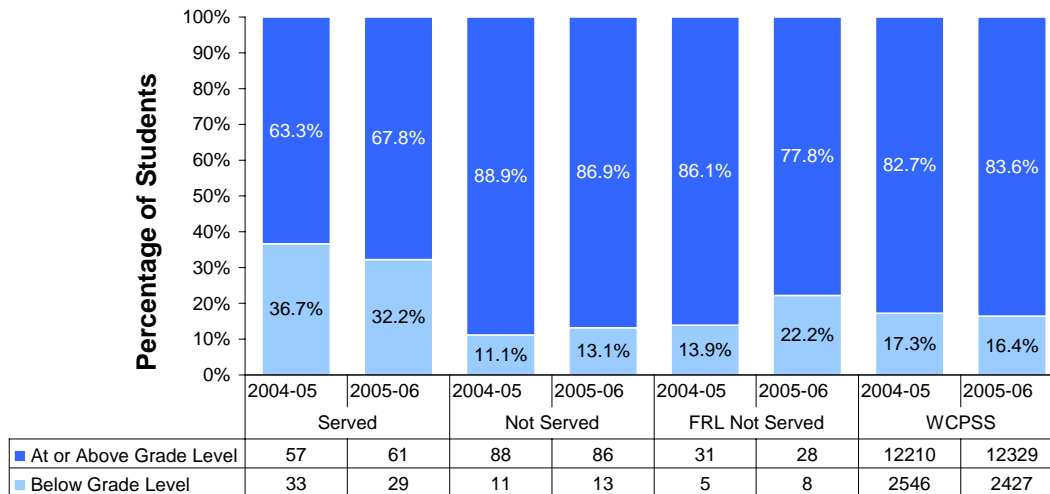
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| <input checked="" type="checkbox"/> | Challenging Learning Experiences for All Students |
| <input checked="" type="checkbox"/> | Curriculum and Resources                          |
| <input checked="" type="checkbox"/> | Effective Use of Data                             |
| <input checked="" type="checkbox"/> | Collaboration                                     |

WCPSS experience with SES is limited to Hodge Road Elementary school in 2005-06. Hodge Road Elementary was required to offer SES through outside providers for their low income students in 2005-06. Results for Hodge Road in 2005-06 suggest SES did **not** appear to be highly effective in promoting low-income student achievement overall. The student outcome results were mixed, with served students outperforming not-served students in grades 1 and 2, but not in grades 3-5. Students with multiple-risk factors showed the best outcomes. Little benefit was evident for those who entered the program scoring at grade level.

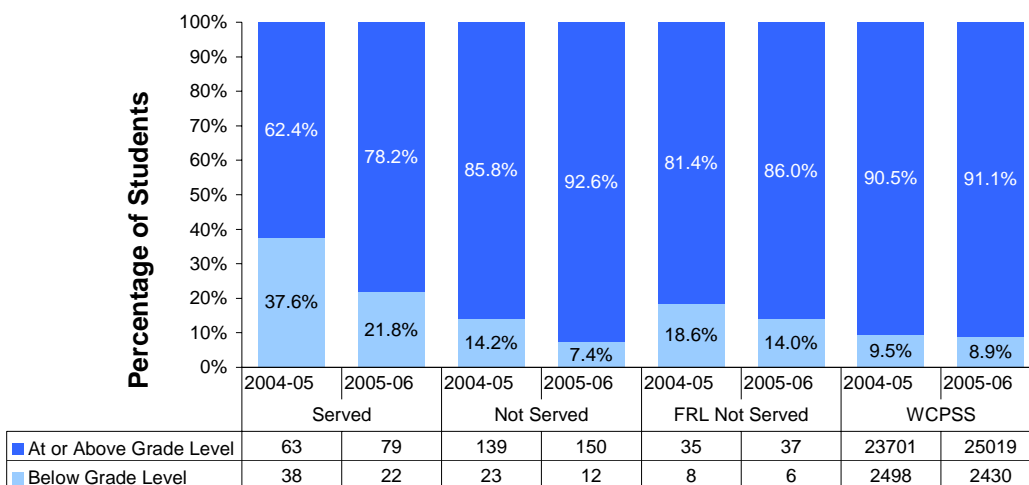
Implementation, curriculum, and communication issues all likely contributed to the outcomes (Paeplov, 2006). Readers are advised to be watchful of the following issues encountered.

- **Curriculum:** The state-approved instructional materials were all remedial in nature and largely based on worksheets. Students who scored at grade level were still generally provided with remediation. Materials were not aligned with what was taught in school and were inflexible.
- **Use of Data:** Data on students' test scores from the previous spring or when they first began the program was generally not used to adjust instruction for students.
- **Communication:** With the exception of one provider, communication with teachers and parents was infrequent and unclear. Additionally, school staff felt they had limited control over curriculum.
- **Implementation:** When the outside providers' tutors were late or absent, group sizes increased. Sessions were held on campus, and tutors were not all paid to stay with the children until they were picked up. School staff usually stayed to maintain student safety.

**Figure 64**  
**Book Level, 2004-05 and 2005-06,**  
**Grades 1 & 2 for Groups Compared**



**Figure 65**  
**EOG, 2004-05 and 2005-06,**  
**Grades 3-5 for Groups Compared**



The study did provide some limited support for early intervention (grades 1 and 2) and tutoring in the basics for multiple-risk students. This may be because of the more limited skill set of these students. In addition, the highly structured nature of the learning activities may have been more helpful to these students.

## DISCUSSION

This report departs from the past traditions of the Evaluation and Research Department of WCPSS. In the past, we have primarily produced reports that presented and analyzed results from single tests. That is a given report would present and analyze data for End of Grade tests, while another report would be devoted to Advanced Placement tests. This year, however, we have shifted the unit of analysis from specific tests to levels of schooling. That is, we bring together a variety of measures of performance for each of the three levels of school: elementary, middle, and high. We believe that by presenting a comprehensive look at a variety of outcomes, the reader of this report will be better able to create a synthesis of information about the schooling outcomes. 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. The initial effects of this policy shift may be seen in the outcomes for mathematics in grades 3 through 8.

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. 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 Wake County Public Schools, 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 Adequate Yearly Progress (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 definition, 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.

This raising of the standard for passing End of Grade and End of Course tests may be expected to continue into the future. In 2006-2007, new standards have been instituted for End of Course tests in English I and all high school mathematics tests. Similarly, in 2007-08, a new series of reading EOG tests will be utilized. 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 End of Course 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 End of Course 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. Examination of the test scores for these courses in 2005-2006 indicate that this new requirement will result in a number of students having to re-take the EOC test and, perhaps, having to re-take the course. Likely 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.

Two measures have already 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.

While both 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, students of color 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.

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.

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 2005-06, 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 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 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 2005-06, 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 15 percentage points. Importantly, larger percentages of both groups were proficient in reading in 2005-06 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. It is highly likely that the number of students with these combination of risk factors is increasing in WCPSS and so the challenges confronting schools is increasing. Finally, it should be noted that girls, as a group, are more likely to be successful on most measures of achievement than are boys in elementary and middle schools. However, these trend reverses in high schools, with boys, as a group, outscoring girls, 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 boys outscore girls 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 writing teaching and learning. By our own measures and by those used by the state, over 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.

Both the changes in the math 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 2005-06. 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). This pattern is likely to happen 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 teaching and learning. 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. Evaluation and Research staff carried out a study to identify effective practices for teaching multi-risk students, and further research is being carried out on this topic in spring 2007.

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 unacknowledged 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 2005-06

## **Editors**

Nancy Baenen  
David Holdzkom

## **Contributing Staff**

Anne-Sylvie Boykin  
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Department of Evaluation & Research  
WAKE COUNTY PUBLIC SCHOOL SYSTEM  
Raleigh, North Carolina  
[www.wcpss.net/evaluation-research](http://www.wcpss.net/evaluation-research)  
(919) 850-1863