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**Wake County Public School System K-5 Assessment Results
2007-08 Districtwide Summary**

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Abstract

In 2007-08, WCPSS K-5 assessment results were similar to past years. Some changes were implemented in the writing assessment methods. The percentage of students demonstrating proficiency was 85% for book level standards and 72% for reading strands. Mathematics mastery was 69% of students. Writing results for strands was 52%, content rubric was 69%, and conventions rubric was 57%. Differences by subject likely reflect differences in standards for the assessments. NCLB subgroup analyses revealed gaps between ethnic groups and groups with and without risk factors. Between 2006-07 and 2007-08, notable improvements were evident for Hispanic/Latino, American Indian, and Limited English Proficient populations, helping to close the achievement gaps slightly.

Overview

This document briefly summarizes Wake County Public School System (WCPSS) districtwide K-5 assessment results for 2007-08. These results provide the only systemwide results for grades K-2. For grades 3-5, they provide the earliest measure of reading mastery, given that End of Grade (EOG) reading results will not be released until November 2008 due to the revising of state standards for the test. The K-5 assessment results discussed in the report are organized into four categories: receptive literacy (reading), expressive literacy (writing), mathematics, and NCLB subgroup analyses. Each section begins with a basic explanation of the relevant assessments, followed by a table documenting grade-level and district proficiency levels over the past three academic years. The most notable testing results are discussed in bulleted form. The final section of this report includes attachment tables recording the exact numbers of students tested in 2007-08, number proficient, as well as any missing data that could not be included in the analyses.

Receptive Literacy

Receptive Literacy is assessed based on running record book level standards (grades K-2), reading strands (grades 2-5), and expository and narrative assessments (grades 3-5).

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For running record book level, students must demonstrate a 90-94 percent accuracy rate and a retelling score of at least a three out of a possible four. Book levels range from 1-2 to 31-32; the mastery benchmark is 3-4 for kindergarten students, 15-16 for first grade students, and 23-24 for second grade students. Reading strand proficiency indicates mastery of all three strands: developing reading habits, applying word identification/vocabulary strategies, and making connections and comprehending texts. Students must score a three (out of a possible four) on every reading strand to be considered proficient on this criterion. This assessment is supplemented by narrative and expository rubrics, which are also scored on a level one through four. These assessments require both reading and writing skills because they require open-ended responses. The following table documents the district’s proficiency percentages by grade over the past three academic years, with the specific number of students assessed by grade (and missing data) shown in Attachment A.

Table 1
Receptive Literacy Proficiency Percentages, 2005-06 to 2007-08, Grades K-5

		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	District Composite
Book Level Standards	2005-06	89.0**	81.0	83.8*				84.5*
	2006-07	89.2**	80.4	83.5				84.3
	2007-08	89.1*	81.0	84.0*				84.6
Reading Strands	2005-06			77.5	70.4	69.3	75.5	73.3
	2006-07			77.2	68.8	69.3	72.8	72.0
	2007-08			77.2	68.1	70.5	73.0	72.3
Expository Rubric	2005-06				53.5**	55.7**	65.0**	58.1**
	2006-07				58.0*	62.0*	67.8*	62.5*
	2007-08				58.0**	64.3*	67.6*	63.4*
Narrative Rubric	2005-06				51.9**	53.9**	68.1**	58.0**
	2006-07				56.8*	61.5*	70.9*	62.9*
	2007-08				57.1**	65.0*	71.5*	64.6*

2008 n = 9,313 to 11,387

Data Source: WCPSS K-5 Assessment Data

- Note: 1. One Asterisk (*) indicates that 5 to 9.9 percent of the assessed population had missing scores
 2. Two Asterisks (**) indicate that over 10 percent of the assessed population had missing scores

Book Level. The percentage of K-2 students achieving book-level standards in 2007-08 was 84.6% of the 32,239 students assessed. Results were similar to 2006-07 (84.3%) and 2005-06 (84.5%). An analysis of available 2007-08 valid scores indicated that 89.1% of kindergarten students reached proficiency (89.2% in 2006-07). However, scores were not

provided for 924 students, and we suspect nearly all of those students could not demonstrate mastery.

Of the 924 students without reported scores, teachers indicated on the end of year survey that 900 of those students were not ready to be assessed with a running reading record; 660 of those students were either limited English proficient (LEP) (444), students with disabilities (SWD) (180), or both (36). Kindergarten teachers are advised not to administer a reading running record to students until they show sufficient mastery of print concepts (ten or more) and some readiness to start reading. Missing data complicates interpretation; however, *if we consider these 924 students to be non-proficient, the percent of kindergartners demonstrating mastery based on book level standards decreases to 81.8%*. This figure likely provides a more accurate view of the overall population, and is more consistent with the district's results in grades 1-2. Additional analyses indicate that 34.3% of the students with a valid print concept score (including the LEP and SWD subgroups) mastered at least 17 of the 19 print concepts needed for grade-level proficiency. Furthermore, 87.6% of these students had mastered ten or more print concepts. It seems likely these students were ready to be assessed with a running reading record. We do not know if some of these students may have demonstrated print concept knowledge in a language other than English, if teachers elected to use other assessments for the LEP or SWD students, if the teachers concluded that these students were simply not ready for the assessment, or whether time constraints played a part in these students not having a print concepts score. See Attachment B for more detail.

Reading Strands. In grades 2-5, demonstrated proficiency in all three reading strands was 72.3% in 2007-08. This was a modest improvement from 72.0% in 2006-07, but still falls short of the 73.3% established in 2005-06.

Expository and Narrative Assessments. Unlike the running reading record discussed above, expository and narrative assessments are mandatory for all students. In grades 3-5, both of these assessments showed modest improvement from the previous school year, continuing the uninterrupted upward trend from 2005-06. More specifically, over the past three years the percentage of students at or above standard has risen from 58.1% to 63.4% on the expository rubric. Similarly, the narrative rubric scores have risen from 58.0% to 64.6%. Missing data has been an issue for these measures, with some improvement evident at grades 4 and 5 over time. Results have traditionally been lower than mastery percentages on the End-of-Grade tests (91.3% in 2006-07), with results for 2007-08 due out this November after the new test results are reviewed and new cut scores for each level established (Holdzkom, 2008).

Expressive Literacy

Expressive literacy assessments are based on an evaluation of an unassisted writing sample (grades K-1), writing strands (grades 2-5), and rubrics documenting students' skills for writing conventions and writing content (grades 3-5). The unassisted writing sample classifies each student's writing stage as prewriting and early emergent,

emergent, late emergent, early developing, developing, late developing, early independent, mid independent, or late independent. The grade-level benchmarks are late emergent for kindergarten students, late developing for first grade students, and late independent for second grade students.

The writing strands indicate overall performance for each of the six strands: writing variety, focus, organization, support and elaboration, style, and conventions. Students must score a three out of a possible four on every writing strand to be considered proficient. This assessment is supplemented by scores from the writing conventions and writing content rubrics. The writing conventions rubric is scored from a zero (non-proficient) to a passing score of three (highly proficient). To achieve mastery on the writing content rubric, students must score at least a three out of a possible four.

It must also be noted that some changes have been made in the assessment of expressive literacy. More specifically, an unassisted writing sample is no longer assessed for the second grade students. Furthermore, the five writing strands used for testing in previous academic years have been dropped; these have been replaced by the six different strands (listed above) for evaluation purposes. The testing results on the writing strands, consequently, are not directly comparable to previous assessments. The subsequent changes to the district’s expressive literacy assessment profile are summarized in the bullets below. Table 2 documents the district’s proficiency levels by grade over the past three academic years. The exact numbers of cases, as well as the numbers of missing data, are detailed in Attachment C.

Table 2
Expressive Literacy Proficiency Percentages, 2005-06 to 2007-08, Grades K-5

		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	District Composite
Stage of Writing Standard for Unassisted Sample	2005-06	73.3	66.2	26.5				55.2
	2006-07	78.6	67.6	31.5				60.1
	2007-08	82.4	68.9					75.5
Writing Strands	2005-06			60.6	54.3	52.5	66.8	58.6
	2006-07			58.6	53.6	53.3	63.2	57.1
	2007-08			54.1	46.8	48.9	59.4	52.3
Writing Content Rubric	2005-06				64.6	61.1	76.2	67.3
	2006-07				67.6	66.8	76.6	70.2
	2007-08				64.2	68.8	74.8	69.2
Writing Conventions Rubric	2005-06				53.4	50.4	59.3	54.4
	2006-07				52.4	53.2	58.3	54.6
	2007-08				53.6	56.5	59.9	56.6

2008 n = 10,191 to 11,485

Data Source: WCPSS K-5 Assessment Data

The percentage of students scoring proficient in 2007-08 was considerably higher than past years, partly because grade 2 was dropped from this assessment and partly due to improvements at grades K and 1.

- As noted earlier, the 2005-06 and 2006-07 assessments evaluated unassisted writing samples from students in grades K-2. Although 60.1% of students in grades K-2 met the stage-of-writing standard in 2006-07, only 31.5% of 2nd grade students met their established benchmark – which lowered the district’s overall composite score. Still, this was an improvement over the second grade 26.5% proficiency score in 2005-06. Regardless, in the 2007-08 academic year only students in grades K-1 were evaluated on their last unassisted writing sample, which partially explains the overall proficiency leap from 60.1% (in 2006-07) to 75.5%.
- On a positive note, both the kindergarten and 1st grade students showed an improvement on their unassisted writing sample assessment from previous years, continuing the upward trend established in 2005-06. More specifically, over the past three years the kindergarten students’ proficiency scores have risen from 73.3% to 82.4%, whereas the first grade students’ scores have risen from 66.2% to 68.9%.
- Failure to demonstrate mastery on even one of the six strands prevents a student from being considered universally proficient in writing, which helps to explain the district’s 2007-08 mastery rating of 52.3%. For context, 58.6% of the assessed population in 2005-06 and 57.1% of the students in 2006-07 were able to demonstrate mastery of all five of the previous writing strands.
- The percentage of students in grades 3-5 who mastered writing content in 2007-08 decreased by one percentage point to 69.2%, down from 70.2% in 2006-07. Increasingly larger percentages of students attained mastery as they progressed through the grade levels: 64.2% of 3rd grade students, 68.8% of 4th grade students, and 74.8% of 5th grade students performed at or above the established standard.
- The overall proficiency rate for students in grades 3-5 mastering writing conventions rose to 56.6% in 2007-08, up from 54.4% two years ago. As with writing content, a larger percentage of students demonstrated mastery as they attained higher grade levels.

Mathematics

Mathematics assessments for grades K-5 are based on an evaluation of five specific strands that remain unchanged. These are number and operations, measurement, geometry, data analysis and probability, and algebra. Table 3 documents each grade’s proficiency level for those strands over the past three academic years.

Table 3
Mathematics Proficiency Percentages, 2005-06 to 2007-08, Grades K-5

		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	District Composite
Number & Operations	2005-06	84.0	83.2	78.6	81.1	79.7	83.2	81.7
	2006-07	85.9	82.7	78.8	80.3	76.9	81.9	81.2
	2007-08	86.1	83.7	79.2	77.9	77.5	81.4	81.1
Measurement	2005-06	84.5	80.6	79.3	75.2	76.3	77.8	79.2
	2006-07	86.0	80.2	80.3	74.5	76.4	72.8	78.6
	2007-08	85.9	82.8	78.6	73.5	77.3	72.3	78.6
Geometry	2005-06	84.5	82.7	78.7	80.0	78.8	80.1	80.9
	2006-07	86.3	83.7	79.7	78.3	77.3	75.1	80.3
	2007-08	85.9	80.6	80.4	77.3	78.5	74.9	79.7
Data Analysis & Probability	2005-06	85.4	79.7	75.0	75.6	75.3	79.6	78.6
	2006-07	87.3	79.8	75.8	74.1	74.8	77.5	78.4
	2007-08	87.5	81.0	76.0	73.3	76.4	77.8	78.8
Algebra	2005-06	85.7	78.9	73.7	75.8	71.7	76.3	77.3
	2006-07	87.2	79.0	74.3	73.9	70.5	72.7	76.6
	2007-08	87.8	79.1	73.8	72.7	71.4	73.4	76.5
All Strands	2005-06	77.3	70.8	65.7	66.4	65.1	70.9	69.6
	2006-07	79.5	72.4	66.8	65.7	65.3	66.1	69.6
	2007-08	79.5	71.9	67.0	64.7	66.2	66.2	69.4

2008 $n = 10,142$ to $11,318$

Data Source: WCPSS K-5 Assessment Data

Scores in the mathematics assessments remained relatively stable, with 69.4% of the K-5 students demonstrating proficiency in all five strands. For comparison, 69.6% of K-5 students have been universally proficient since the 2005-06 school year.

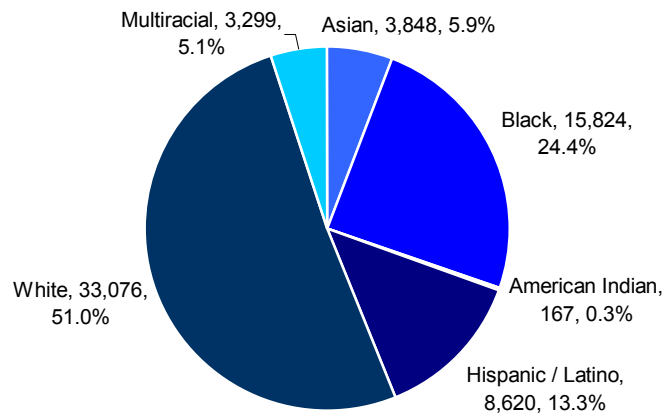
- In 2007-08, mastery of the individual mathematics strands ranged from the low score of 76.5% in “algebra” to the high score of 81.1% in “number and operations.” This pattern by strand has been stable for the last three years.
- By grade, kindergarten students have shown the highest mastery percentages for the last three years, with lower mastery percentages at the intermediate grades (3-5) than at the primary grades (K-2).

NCLB Subgroup Composition

While WCPSS has disaggregated test results by ethnicity for many years, the No Child Left Behind (NCLB) legislation dictates that districts disaggregate academic testing data to analyze the performance of a broader range of predefined subgroups. Three subgroup analyses monitor students who have a greater risk of academic failure. The first of these subgroups includes the economically disadvantaged; these students are identified by their participation in the free or reduced price lunch (FRL) program. The second group includes students with disabilities (SWD), and the third group encompasses the students with limited English proficiency (LEP). For comparison and context, analyses are also conducted to determine the proficiency levels of students outside of these three at-risk subgroups. For clarity, those categories are simply labeled Not FRL, Not LEP, and Not SWD.

In addition to these three groups, NCLB analyses are conducted on six ethnic subgroups: American Indian, Asian, Black, Hispanic/Latino, White, and Multiracial students. All students are in one of these subgroups, but may also be in the risk groups mentioned above. Based on these NCLB subgroups, the ethnic profile of WCPSS K-5 students in 2007-08 can be graphically illustrated in Figure 1.

Figure 1
WCPSS Student Population by Race, Grades K-5, 2007-08



N = 64,834

Data Source: 2007-08 K-5 Assessment Data and Spring 2008 WCPSS Student Locator Data

NCLB Reading Proficiency

Subgroup proficiency trends were calculated for reading based on the K-2 running record book level standards. The following table documents the three-year performance of the NCLB subgroups at the greatest risk of academic failure.

**Table 4
Reading Proficiency Percentages by NCLB At-Risk Subgroups,
2005-06 to 2007-08**

		Grade K	Grade 1	Grade 2	District Composite
FRL	2005-06	78.3	63.3	67.4	69.3
	2006-07	76.8	60.9	66.1	67.4
	2007-08	75.8	61.0	67.5	67.6
Not FRL	2005-06	94.0	90.1	91.6	91.9
	2006-07	94.5	90.5	91.9	92.3
	2007-08	94.6	91.0	92.1	92.5
SWD	2005-06	77.9	57.3	57.5	62.2
	2006-07	75.2	52.1	55.7	59.0
	2007-08	75.1	52.5	53.5	58.6
Not SWD	2005-06	89.8	83.6	87.1	86.8
	2006-07	90.2	83.5	87.2	86.9
	2007-08	90.2	83.7	87.7	87.1
LEP	2005-06	69.1	47.0	46.9	55.7
	2006-07	70.4	50.2	44.9	55.3
	2007-08	71.6	55.2	59.2	61.2
Not LEP	2005-06	91.5	84.7	86.3	87.4
	2006-07	91.6	85.4	87.2	88.0
	2007-08	91.5	85.5	87.9	88.2

2008 *n* > 2,924 in all subgroups; some students may be in more than subgroup

Data Source: 2007-08 K-5 Assessment Data and Spring 2008 WCPSS Student Locator Data

Note: Only valid scores are included; K had close to 10% of students unable to take the book level assessment, most of whom were LEP or SWD students

- Socioeconomic status continues to be a powerful predictor of academic achievement. In 2007-08 67.6% of the K-2 FRL students met the book-level reading standard, while 92.5% of the Not FRL students were judged proficient on the same measure – an achievement gap of 24.9 percent. Similar

achievement gaps are evident between the SWD and Not SWD populations (28.5%), as well as the LEP and Not LEP subgroups (27%).

- The three year trends show that the achievement gaps have been persistent, and that each subgroup's composite score seldom varies more than one percentage point from year to year. The notable exception has been the jump in LEP reading proficiency from 55.3% in 2006-07 to 61.2% in 2007-08. For comparison, the Not LEP subgroup rose only slightly, from 88.0% to 88.2% on the same measure.

The following table documents the relative performance of the ethnic subgroups over the past three academic years based on book level standards.

Table 5
Reading Proficiency by NCLB Ethnic Subgroups, 2005-06 to 2007-08

		Grade K	Grade 1	Grade 2	District Composite
Asian	2005-06	93.4	91.5	89.1	91.4
	2006-07	94.2	89.8	89.1	91.1
	2007-08	95.4	90.5	90.2	92.0
Black/African American	2005-06	83.9	71.7	73.3	76.1
	2006-07	83.6	71.7	74.2	76.2
	2007-08	82.7	70.6	74.5	75.6
American Indian	2005-06	90.5	72.7	66.7	75.3
	2006-07	87.5	73.9	85.2	82.9
	2007-08	95.0	86.5	100.0	92.4
Hispanic/Latino	2005-06	68.4	54.0	62.2	61.1
	2006-07	69.4	50.3	58.6	58.8
	2007-08	72.0	55.6	62.0	62.5
White	2005-06	94.7	90.8	92.4	92.6
	2006-07	95.2	91.3	93.3	93.2
	2007-08	94.8	91.9	93.2	93.3
Multiracial	2005-06	90.4	83.4	86.2	86.6
	2006-07	90.7	83.1	83.7	86.0
	2007-08	91.0	82.2	86.8	86.6

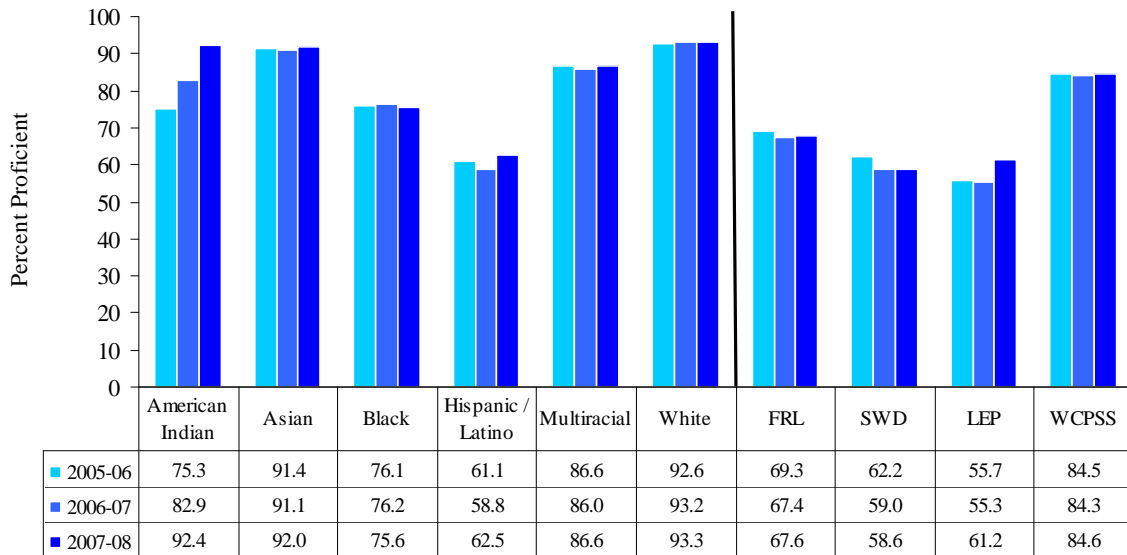
2008 $n > 1,814$ for all subgroups except for American Indian, which was 79

Data Source: 2007-08 K-5 Assessment Data and Spring 2008 WCPSS Student Locator Data

Most ethnic subgroups fluctuated less than one percentage point from the previous 2006-07 school year. The notable exceptions were the reading proficiency gains made by the American Indian (which jumped from 82.9% to 92.4%) and Hispanic/Latino (which moved from 58.8% to 62.5%) populations. For comparison, the White subgroup showed an increase of only one-tenth of one percentage point over the same time period.

Figure 2 graphically illustrates the persistent disparities between all of the NCLB subgroups included in the reading proficiency analysis. This table lists each subgroup’s overall composite score for the three academic years since 2005-06, and does not disaggregate the data by grade level such as the table above. The WCPSS average, which includes all subgroups, has been included for comparison purposes.

Figure 2
Students Meeting Book-Level Standards by NCLB Subgroups,
2005-06 to 2007-08



2008 n > 1,814 for all subgroups except for American Indian, which was 79
 Data Source: 2007-08 K-5 Assessment Data and Spring 2008 WCPSS Student Locator Data

It is worth noting that two subgroups – American Indian and White – have shown an uninterrupted upward trend in reading proficiency. Furthermore, the Hispanic/Latino population has rebounded from a “dip” in 2006-07 to exceed the 2005-06 benchmark. The only subgroup with a consistent downward trend was the SWD population.

NCLB Mathematics Proficiency

Like the NCLB reading proficiency analyses, the mathematics data are disaggregated to examine the populations that currently face the greatest risk of academic failure. As before, those are the students receiving a free or reduced lunch (FRL), students with

disabilities (SWD), and limited English proficient (LEP) subgroups. Table 6 documents the mathematics proficiency percentages of each of these subgroups, by grade, over the past three academic years.

Table 6
Mathematics Proficiency Percentages by NCLB At-Risk Subgroups,
2005-06 to 2007-08

		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	District Composite
FRL	2005-06	57.9	50.1	41.6	43.2	40.3	46.7	47.1
	2006-07	59.4	50.4	42.3	39.4	39.5	39.6	45.7
	2007-08	59.9	49.6	43.4	39.8	40.5	41.5	46.1
Not FRL	2005-06	88.2	81.7	78.0	78.2	76.9	81.5	80.9
	2006-07	89.8	84.1	78.9	77.9	78.0	78.2	81.3
	2007-08	89.0	83.4	79.0	77.1	78.4	78.0	81.0
SWD	2005-06	50.7	47.1	38.9	38.4	34.8	38.8	40.8
	2006-07	50.2	44.5	39.4	34.6	31.4	31.0	37.5
	2007-08	53.4	42.8	38.6	33.5	33.0	29.1	37.2
Not SWD	2005-06	79.8	73.5	69.4	70.8	70.3	77.2	73.6
	2006-07	82.2	75.7	70.6	70.6	71.3	72.4	74.1
	2007-08	81.9	75.0	70.7	69.5	71.9	72.5	73.8
LEP	2005-06	48.1	40.3	32.8	40.7	35.2	41.1	41.2
	2006-07	53.9	49.0	35.8	27.9	36.8	38.0	43.3
	2007-08	52.3	51.4	45.5	34.0	34.7	40.6	45.5
Not LEP	2005-06	82.4	74.3	68.2	68.8	67.3	72.7	72.4
	2006-07	83.7	76.4	69.8	68.3	67.8	68.3	72.5
	2007-08	84.4	75.7	70.7	67.8	68.8	68.5	72.7

2008 $n > 7,439$ for all subgroups

Data Source: 2007-08 K-5 Assessment Data and Spring 2008 WCPSS Student Locator Data

- As with reading proficiency, disparities exist between the at-risk populations and their comparison subgroups. The 2007-08 mathematics proficiency of the FRL population was 46.1% compared to 81% for the Not FRL population for an achievement gap of 34.9%. This is similar to the gaps between the SWD and Not SWD populations (36.6%), as well as the LEP and Not LEP subgroups (27.2%).

- The three year timeline shows that the composite proficiency scores for each subgroup in mathematics decreased slightly for FRL and SWD students while staying stable for Not FRL and Not SWD students. On a positive note, LEP students increased their proficiency rating from 41.2% to 45.5% over the past three academic years, whereas the Not LEP students showed a more modest increase by growing from 72.4% in 2005-06 to 72.7% in 2007-08 (narrowing the achievement gap slightly).

The following table documents the relative performance of the ethnic subgroups over the past three academic years.

Table 7
Mathematics Proficiency by NCLB Ethnic Subgroups, 2005-06 to 2007-08

		Grade K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	District Composite
Asian	2005-06	87.2	81.0	82.6	84.9	87.8	91.5	85.7
	2006-07	90.4	89.3	81.9	84.4	85.8	89.1	86.9
	2007-08	89.5	87.2	85.1	84.3	86.6	87.4	86.7
Black	2005-06	66.3	64.1	42.9	44.5	40.7	49.6	50.1
	2006-07	69.2	54.0	43.6	40.9	41.5	40.9	48.5
	2007-08	68.5	52.3	44.8	41.9	41.7	41.5	48.3
American Indian	2005-06	87.0	71.4	70.0	61.1	55.6	64.0	68.9
	2006-07	88.6	78.3	70.4	62.1	65.2	64.3	72.1
	2007-08	71.4	78.4	72.7	58.6	65.7	73.9	70.1
Hispanic/Latino	2005-06	47.3	46.9	42.2	47.5	41.4	51.0	46.0
	2006-07	53.3	47.9	44.9	40.7	43.6	48.3	46.9
	2007-08	53.6	51.4	44.9	41.6	45.4	46.1	47.7
White	2005-06	89.7	83.8	80.4	79.8	79.5	82.8	82.8
	2006-07	90.4	86.3	81.8	80.5	79.9	80.1	83.3
	2007-08	90.8	85.4	81.8	80.3	80.6	80.6	83.3
Multiracial	2005-06	80.6	72.8	64.8	59.6	65.0	71.1	69.6
	2006-07	82.6	69.0	66.5	66.8	59.7	65.7	69.2
	2007-08	84.0	73.4	65.2	63.4	66.5	66.0	70.5

2008 $n > 3,848$ for all subgroups except for American Indian, which was 167

Data Source: 2007-08 K-5 Assessment Data and Spring 2008 WCPSS Student Locator Data

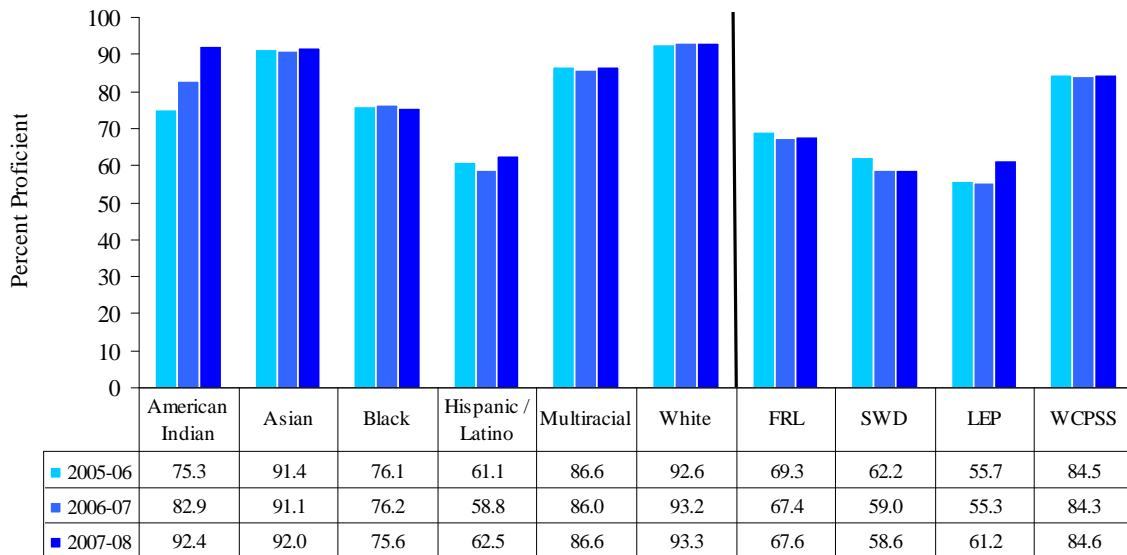
Note: 1. Based on mastery across all five strands

2. NCLB results for American Indian fluctuate more from year to year due to the small sample size

- Here again, the 2007-08 scores rarely changed more than one percentage point from the previous 2006-07 school year. The only exception was the American Indian population, which moved from 72.1% in 2006-07 to 70.1 in 2007-08.
- As with the at-risk populations, disparities exist within the subgroups. Achievement levels vary widely; the most recent data from 2007-08 indicates that the highest performing ethnic subgroup (Asian) was 86.7% proficient, whereas the lowest scoring subgroup (Hispanic/Latino) attained a 47.7% proficiency rating – leaving the ethnic achievement gaps as high as 39% in some cases.

Figure 3 graphically illustrates the achievement gaps between the NCLB subgroups included in the mathematics proficiency analysis. This graph lists each subgroup’s overall composite score for the three academic years since 2005-06, and does not disaggregate the data by grade level like the table above. The WCPSS average, which includes all subgroups, has been included for comparison purposes.

Figure 3
Students Meeting Mathematics Proficiency Targets by NCLB Subgroups, 2005-06 to 2007-08



2008 *n* > 3,299 for all subgroups except for American Indian, which was 167
 Data Source: 2007-08 K-5 Assessment Data and Spring 2008 WCPSS Student Locator Data

It is worth noting that the Black and the SWD populations have a modest, yet uninterrupted, downward trend. Conversely, the Hispanic/Latino and LEP subgroups have shown consistent improvement over the past three academic years.

Conclusion and Questions for Discussion

K-5 assessments are not norm-referenced tests, and they are generally used for formative purposes. Summarizing year-end results, however, does provide useful trend data. Overall, the district's 2007-08 K-5 reading and mathematics scores are unmistakably similar to 2006-07 (Rhea, 2007; Holdzkom, 2008).

- The district's composite score on reading proficiency, as measured by the K-2 running record book level standards, moved from 84.3% to 84.6%.
- The district's composite score on the K-5 mathematics strands moved from 69.6% to 69.4%.
- The writing assessment process was completely restructured after the 2006-07 school year; the lower composite scores on the writing strands proficiency assessment administered to students in grades 2-5 (57.1% in 2006-07 to 52.3% in 2007-08) are not directly comparable to previous assessments.
- The No Child Left Behind (NCLB) subgroup analyses showed those scores to be relatively stable as well, rarely fluctuating more than one percentage point from the previous school year. The most notable exceptions were the notable reading gains by the American Indian, Hispanic/Latino, and LEP populations.

K-5 assessment results raise several questions for further discussion and follow up.

- Why were kindergarten students who demonstrated 17 or more print concepts not assessed with a running record?
- Why are mastery percentages so variable across assessments and sometimes across grades within an assessment? Is this acceptable?
- How do these K-5 assessments relate to other formative assessments in use or in development (e.g., tests by objective housed in Blue Diamond)?

Discussing these questions can direct efforts to improve compliance with current guidelines and ideas for future directions.

REFERENCES

Holdzkorn, D. (Ed.). (2008). *WCPSS elementary school student outcomes 2006-07*. Raleigh, NC: Wake County Public School System, Evaluation and Research Department.

Rhea, A. (2007). *WCPSS K-5 assessment results, 2006-07*. Raleigh, NC: Wake County Public School System.

Attachment A

Table A1
Receptive Literacy Number Assessed Data Table, 2007-08

	Number Assessed	Number Proficient	Missing Data
Book Level Standards			
K	10,395	9,261	924
1	11,387	9,218	99
2	10,957	9,203	67
K-2 Combined	32,739	27,682	1,090
Reading Strands			
2	11,022	8,508	2
3	10,519	7,166	0
4	10,316	7,269	0
5	10,197	7,442	0
2-5 Combined	42,054	30,385	2
Expository Rubric			
3	9,313	5,397	1,206
4	9,601	6,178	715
5	9,492	6,421	705
3-5 Combined	28,406	17,996	2,626
Narrative Rubric			
3	9,421	5,379	1,098
4	9,636	6,261	680
5	9,552	6,834	645
3-5 Combined	28,609	18,474	2,423

Attachment B

In 2007-08 approximately 924 kindergarten students lacked a running reading record – which amounts to approximately 8.2% of the population. However, only 24 students had data that were truly “missing” or blank. The other 900 had been coded as having “no running reading record” by their teachers. Of those 924 students, 444 were LEP, 180 were SWD, 36 were both LEP and SWD, and 264 were neither.

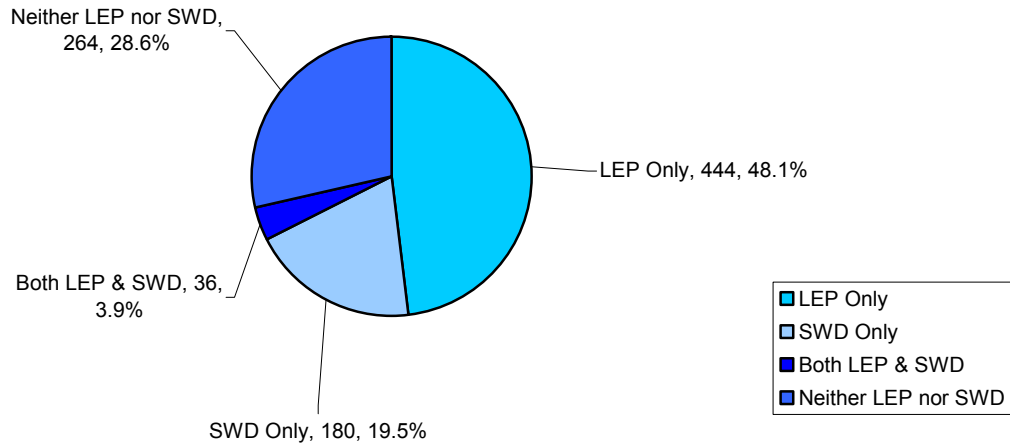
Teachers are encouraged to assess a student with a running reading record once he or she masters ten or more print concepts. The data show that 717 of the 924 students without a reading record had been given a score for print concept mastery; the other 207 students were missing data on the print concepts assessment. Of these 717 students with a score on the print concepts assessment, 338 were LEP, 127 were SWD, 24 were both LEP and SWD, and 228 were neither.

Further analysis showed that 87.6% of the kindergarten students who had been coded as having no running record had mastered ten or more print concepts. By subgroup, 91.4% of the LEP students and 77.2% of the SWD students with “no running reading record” had mastered ten or more print concepts. If we assume that the 207 students missing a print concepts score to be non-proficient, the percentage of students demonstrating mastery of ten or more print concepts drops to 68%.

It is also worth noting that grade-level proficiency is attained when a student has mastered 17 or more print concepts. The data show that 34.3% of the kindergarten students lacking a reading record had mastered 17 or more print concepts. By subgroup, 30.2% of the LEP students and 29.9% of the SWD students lacking a reading record had attained the 17+ proficiency benchmark.

On the surface, the data suggest that many of the students coded as having “no running reading record” should have been assessed. Additional analyses were conducted to explore this issue. Figures B1 and B2 explain the demographic profile of the students lacking reading records – most of whom are LEP. Table B1 documents the performance of the 717 students who lack a reading record but have a score for print concepts. For comparison, Table B2 shows how the performance assessment results would change if we assume that all of the students lacking a reading record are non-proficient.

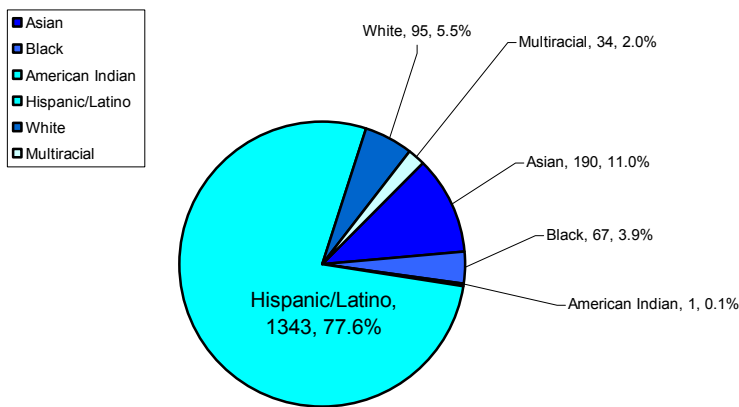
Figure B1
Characteristics of Students with No Running Reading Record, 2007-08



N=924 / 11,319

Source: 2007-08 WCPSS Testing Data and Spring 2008 Student Locator Data

Figure B2
Demographic Profile of WCPSS Kindergarten LEP Students, 2007-08



N=1,730 / 11,319

Source: 2007-08 WCPSS Testing Data and Spring 2008 Student Locator Data

Table B1
Print Concept Mastery for Students with No Running Reading Record
(Analysis Excludes Missing Scores)

Print Concepts Mastered	n LEP	% LEP	n SWD	% SWD	n LEP & SWD	% LEP & SWD	n All w/o Scores	% All w/o Scores
0	2	0.59%	4	3.15%	0	0.00%	7	0.98%
1	1	0.30%	0	0.00%	0	0.00%	1	0.14%
2	2	0.59%	2	1.57%	0	0.00%	7	0.98%
3	2	0.59%	1	0.79%	0	0.00%	5	0.70%
4	2	0.59%	4	3.15%	0	0.00%	7	0.98%
5	1	0.30%	2	1.57%	0	0.00%	5	0.70%
6	3	0.89%	2	1.57%	0	0.00%	8	1.12%
7	3	0.89%	2	1.57%	0	0.00%	10	1.39%
8	6	1.78%	5	3.94%	1	4.17%	16	2.23%
9	7	2.07%	7	5.51%	0	0.00%	23	3.21%
10	16	4.73%	10	7.87%	1	4.17%	41	5.72%
11	19	5.62%	6	4.72%	2	8.33%	34	4.74%
12	32	9.47%	9	7.09%	3	12.50%	54	7.53%
13	22	6.51%	7	5.51%	0	0.00%	40	5.58%
14	41	12.13%	9	7.09%	1	4.17%	69	9.62%
15	42	12.43%	9	7.09%	4	16.67%	76	10.60%
16	35	10.36%	10	7.87%	2	8.33%	68	9.48%
17	27	7.99%	11	8.66%	3	12.50%	65	9.07%
18	29	8.58%	10	7.87%	1	4.17%	65	9.07%
19	46	13.61%	17	13.39%	6	25.00%	116	16.18%
Total	338	100.00%	127	100.00%	24	100.00%	717	100.00%

Source: 2007-08 K-5 Assessment Data and Spring 2008 Student Locator Data

- Note:
1. The grade level standard for proficiency is 17 print concepts.
 2. Teachers are encouraged to assess students with a running reading record once they master ten print concepts.
 3. 207 missing (blank) print concepts scores were excluded from this analysis.

Table B2
Print Concept Mastery for Students with No Running Reading Record
(Missing Scores Set to Zero)

Print Concepts Mastered	n LEP	% LEP	n SWD	% SWD	n LEP & SWD	%LEP & SWD	n All w/o Scores	% All w/o Scores
0 and no score (missing)	108	24.32%	57	31.67%	12	33.33%	214	23.16%
1	1	0.23%	0	0.00%	0	0.00%	1	0.11%
2	2	0.45%	2	1.11%	0	0.00%	7	0.76%
3	2	0.45%	1	0.56%	0	0.00%	5	0.54%
4	2	0.45%	4	2.22%	0	0.00%	7	0.76%
5	1	0.23%	2	1.11%	0	0.00%	5	0.54%
6	3	0.68%	2	1.11%	0	0.00%	8	0.87%
7	3	0.68%	2	1.11%	0	0.00%	10	1.08%
8	6	1.35%	5	2.78%	1	2.78%	16	1.73%
9	7	1.58%	7	3.89%	0	0.00%	23	2.49%
10	16	3.60%	10	5.56%	1	2.78%	41	4.44%
11	19	4.28%	6	3.33%	2	5.56%	34	3.68%
12	32	7.21%	9	5.00%	3	8.33%	54	5.84%
13	22	4.95%	7	3.89%	0	0.00%	40	4.33%
14	41	9.23%	9	5.00%	1	2.78%	69	7.47%
15	42	9.46%	9	5.00%	4	11.11%	76	8.23%
16	35	7.88%	10	5.56%	2	5.56%	68	7.36%
17	27	6.08%	11	6.11%	3	8.33%	65	7.03%
18	29	6.53%	10	5.56%	1	2.78%	65	7.03%
19	46	10.36%	17	9.44%	6	16.67%	116	12.55%
Total	444	100.00%	180	100.00%	36	100.00%	924	100.00%

Source: 2007-08 K-5 Assessment Data and Spring 2008 Student Locator Data

- Note:
1. The grade level standard for proficiency is 17 print concepts.
 2. Teachers are encouraged to assess students with a running reading record once they master ten print concepts.
 3. The percentage of students earning a score of “zero” increasing dramatically, while the percentage earning a score of ten or more print concepts decreases substantially (over 20%) when those without scores are considered.
 4. Overall, over two-thirds of the LEP and SWD students without a score could be reasonably expected to have earned a valid score on the running record.

Attachment C

Table C1
Expressive Literacy Number Assessed Data Table, 2007-08

	Number Assessed	Number Proficient	Missing Data
Unassisted Writing Sample			
K	11,075	9,129	244
1	11,485	7,909	1
K-1 Combined	22,560	17,038	245
Writing Strands			
2	11,021	5,959	3
3	10,519	4,918	0
4	10,314	5,044	2
5	10,191	6,053	6
2-5 Combined	42,045	21,974	11
Writing Content Rubric			
3	10,519	6,748	0
4	10,315	7,095	1
5	10,191	7,626	6
3-5 Combined	31,025	21,469	7
Writing Conventions Rubric			
3	10,519	5,638	0
4	10,315	5,828	1
5	10,191	6,102	6
3-5 Combined	31,025	17,568	7

Attachment D

Table D1
Mathematics Number Assessed Data Table, 2007-08

	Number Assessed	Number Proficient	Missing Data
Mathematics Strands			
K	11,176	8,886	1
1	11,318	8,137	23
2	10,880	7,292	3
3	10,328	6,682	0
4	10,142	6,714	0
5	10,185	6,738	0
K-5 Combined	64,029	44,449	27