



ANALYSIS OF 2009-10 WCPSS SAT SCORES

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1. In 2009-10¹, students in Wake County Public Schools (WCPSS) posted average SAT scores of 543 in mathematics, 524 in critical reading and 504 in writing. The combined score for mathematics and critical reading was 1067, with a total average score of 1571. The combined mathematics and critical reading score was 7 points lower than the combined score for 2008-09 but was higher than the combined score average registered for the period 2006-2008. The average combined mathematics and critical reading score for seniors in North Carolina was up two points as compared with the prior year, while the national average for 2009-10 was up one point from the prior year.
2. Over the last 20 years, the average SAT combined score (mathematics and critical reading) for WCPSS students has moved from 1007 to 1067. The average score for North Carolina has moved from 952 to 1008, while the national average score has gone from 999 to 1017. Thus, WCPSS students have added 60 points to their combined score over the period, while state students have added 56 points and students nationally have added 18 points.
3. In 1991, WCPSS exceeded the national average by 8 points. By 2010, WCPSS exceeded the national average by 50 points. Similarly, in 1991, WCPSS exceeded the state average by 55 points. In 2010, the difference was 59 points.
4. Since 1991 students across the nation, the state, and the district have improved scores on the mathematics portion of the test faster than they have on the verbal/critical reading portion. While the nation added 16 points to the mathematics score and only 2 points to the verbal/critical reading score, the state added 37 points to the mathematics portion and 19 points on the verbal/critical reading average. Students in WCPSS added 35 points to the mathematics average and 25 points to the reading score average.
5. In March 2006, the Educational Testing Service re-introduced the writing portion of the SAT. WCPSS students scored on average 12 points over the nation and 24 points over the state average on this test in 2007-08. In 2009-10, WCPSS students, on average outscored students in the nation by 12 points on this measure and outscored state students by 27 points on the writing test.

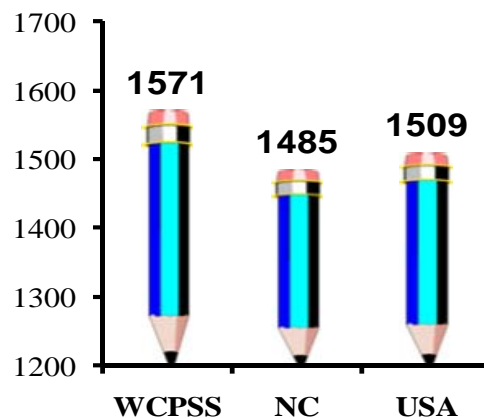
¹For more information about 2010 SAT statewide results including individual schools, click: <http://www.dpi.state.nc.us/accountability/reporting/sat/2010>

6. For the first time in 2008-09, participation rates in WCPSS were below 70%. During 2009-10, there was an increase of 5 percentage points in participation over 2008-09 to 69%. At the state level, participation stayed steady at 63%, the same as for 2007-08 and 2008-09. Nationally, there was a one percentage point increase over the 2008-09 rate. National participation was 45% in 2007-08, 46% in 2008-09 and 47% in 2009-10. All of the data described above may be found in Table 1, Figure 2, and Figure 3 below.
7. Table 2 shows the top 12 average scores for North Carolina school districts. The score shown is the total score (mathematics plus critical reading plus writing). The number of test-takers included in the calculation is also shown. From this table, it may be seen that WCPSS students had the 5th highest average score in the state and the largest number of test-takers by far, more than six times the number of the second highest district.
8. Compared with other large school districts in the state, WCPSS had both higher average scores and higher participation rates (with the exception of participation in Durham). As may be seen in Table 3, all districts in the cohort had higher participation rates in 2009-10 than in the prior year. Except for Mecklenburg, all members of the cohort had the same or a slightly lower score in 2009-10 than in the prior year.
9. A comparison of the average performance of male and female students in the district shows that, when considering the mathematics and critical reading portions combined, female students continue to lag behind their male counterparts. However, between 2007-08 and 2009-10, female students improved their scores by 13 points, whereas male students posted a 3 point improvement. While both groups had lower average scores in 2009-10 than in the prior year, the trend continues positive for both groups. Female test takers have gained 11 points on average over the last four years, while males have gained 10 points over the same period. Figure 4 provides additional information.
10. Figure 5 shows the disaggregation of SAT scores by race/ethnicity over time. In all three categories—White, Black/African-American, and Hispanic/Latino—WCPSS students continue to outperform their state and national counterparts. Moreover, the improvement rate for WCPSS students has generally been much faster than for their comparison groups over the last seven years. For example, while WCPSS Hispanic/Latino students had a 38 point improvement from 2003-04 to 2009-10, Hispanic/Latino students in the state gained 5 points, and nationally gained only 1 point. While WCPSS Black/African-American students improved by 10 points during that span, there was a 12 point improvement for state Black/African-American students and no improvement nationally. White students in the district, the state and the nation all saw improvements in score over that period, but WCPSS White students improved by 20 points, as compared with 17 and 4 for the state and nation.

In summary, WCPSS students continue to fare well on the SAT test as compared with students in the state and nation. While there was a decline in average test scores in 2009-10 as compared with the prior year, the posted scores continue a trend of measurable improvement over time. Importantly, all major ethnic groups have seen improvement trends and have average scores significantly higher than similar groups in the state and nation. It is also important to note that the WCPSS participation rate improved over 2008-09, which suggests that a larger portion of WCPSS seniors believe that they will be going on to college.

The tables and figures below should be studied by district and school administrators as well as others interested in the quality of education offered in WCPSS. While the comments above may be substantiated by studying these tables, other insights about the results of SAT testing will be gleaned in addition.

Figure 1
SAT Scores for WCPSS, NC, and USA, 2010



Note: WCPSS average derived from College Board's reports which include 38 additional students for WCPSS not in DPI's report.

Table 1
WCPSS, NC, and USA SAT Scores, 1991-2010

Year	WCPSS				NC				USA			
	Total	Math	Verbal	Rate	Total	Math	Verbal	Rate**	Total	Math	Verbal	Rate**
1991	1007	508	499	75	952	474	478	57	999	500	499	42
1992	1025	516	509	74	961	479	482	57	1001	501	500	42
1993	1031	521	510	76	964	481	483	60	1003	503	500	43
1994	1030	520	510	75	964	482	482	60	1003	504	499	42
1995	1039	524	515	76	970	482	488	60	1010	506	504	41
1996	1042	525	517	73	976	486	490	59	1013	508	505	41
1997	1047	529	518	74	978	488	490	59	1016	511	505	42
1998	1052	531	521	76	982	492	490	62	1017	512	505	43
1999	1059	537	522	76	986	493	493	61	1016	511	505	43
2000	1061	539	522	79	988	496	492	64	1019	514	505	44
2001	1054	534	520	79	992	499	493	65	1020	514	506	45
2002	1067	543	524	79	998	505	493	67	1020	516	504	46
2003	1067	543	524	80	1001	506	495	68	1026	519	507	48
2004	1063	539	524	77	1006	507	499	70	1026	518	508	48
2005	1075	548	527	75	1010	511	499	74	1028	520	508	49
2006	1066	544	522*	77	1008	513	495*	71	1021	518	503*	48
2007	1057	538	519*	79	1004	509	495*	71	1017	515	502*	48
2008	1059	541	518*	73	1007	511	496*	63	1017	515	502*	45
2009	1074	548	526*	64	1006	511	495*	63	1016	515	501*	46
2010	1067	543	524*	69	1008	511	497*	63	1017	516	501*	47

*The Verbal test became the Critical Reading (CR) test in March 2005, resulting in test content changes.

**The NC and US participation rates include private and public schools.

Note: The participation rate is the percentage of graduating students who took the SAT I.

Figure 2
SAT Scores, 1991-2010

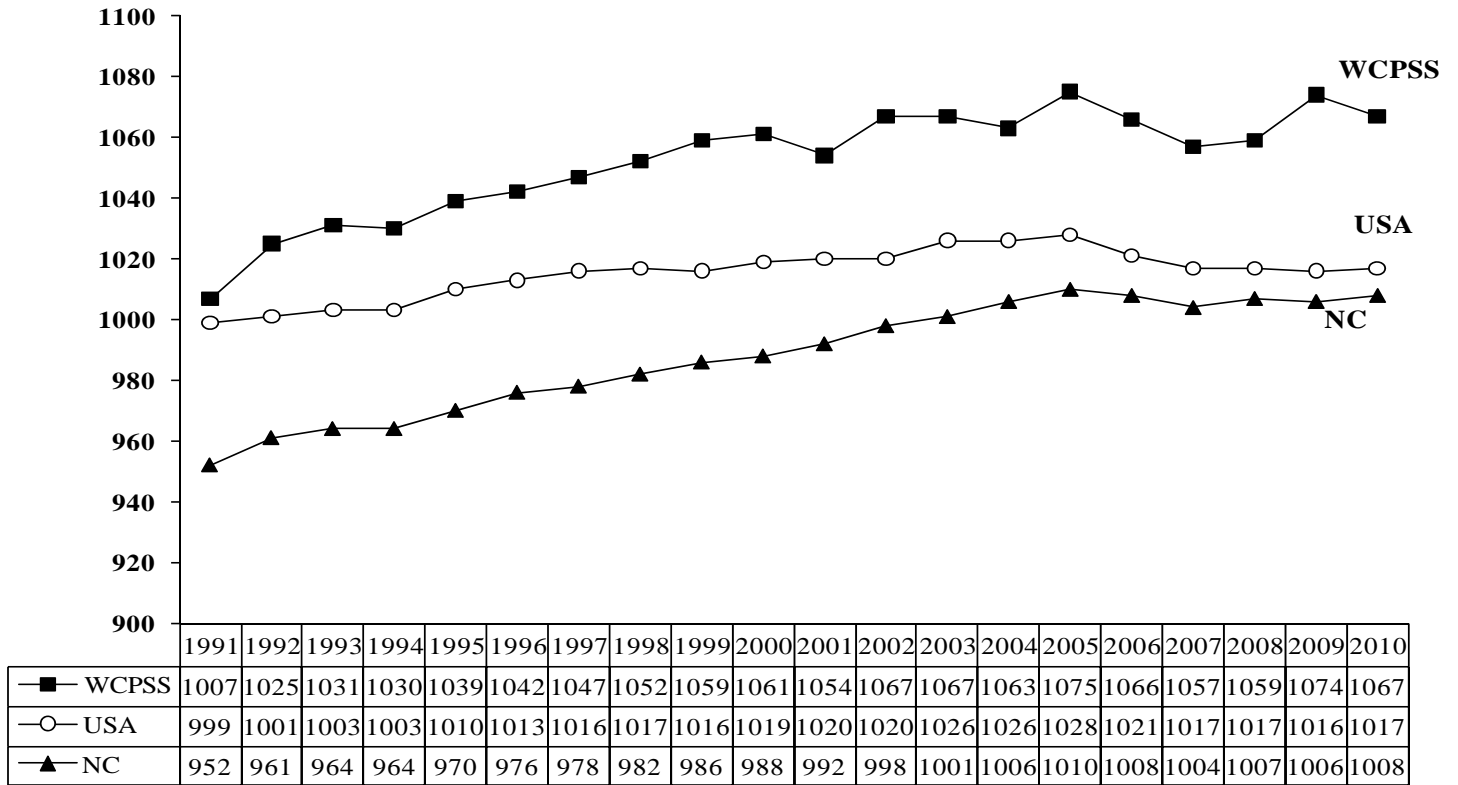
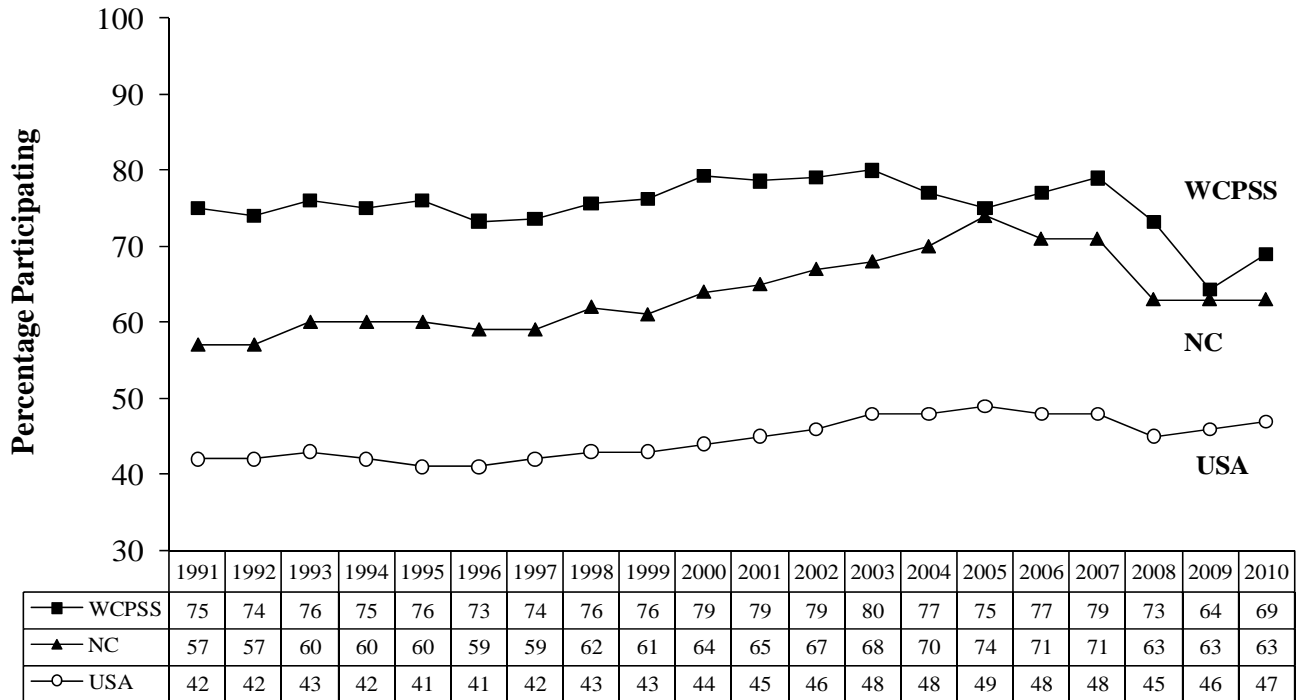


Figure 3
SAT Participation Rates, 1991-2010



Note: The NC and US participation rates include private and public schools.

Table 2
Top 12 NC District SAT Averages, 2010

LEA	2010 M+CR+W*	Number of Test-Takers
Chapel Hill-Carrboro	1776	698
Asheville City	1634	149
Watauga	1613	207
Buncombe	1572	820
Wake	1571	5,782**
Davie	1561	184
Madison	1558	68
Carteret	1550	300
Hickory City	1543	158
Moore	1542	404
Haywood	1541	234
New Hanover	1536	936

*Math+Critical Reading+Writing

**From College Board's reports which include 38 additional students for WCPSS not in DPI's report.

Table 3
Comparison of Wake SAT Scores to Similar Large North Carolina Districts

LEA	2009				2010			
	Total	Math	Critical Reading	Part. Rate	Total	Math	Critical Reading	Part. Rate
Wake	1074	548	526	64.3	1067	543	524	69.0
Charlotte-Mecklenburg	1007	510	497	60.6	1016	515	501	66.3
Forsyth	1002	505	497	57.9	1000	505	495	61.3
Guilford	988	500	488	58.6	988	499	489	64.9
Durham	965	489	476	63.2	963	483	480	82.8
Cumberland	949	479	470	51.3	947	477	470	54.2

Notes: When the actual number of graduates was not known, participation rates reported by NCDPI are used. SAT participation rates reported by the College Board are based upon estimates of counts of graduating seniors compiled through national surveys. While the College Board rates are probably accurate at the state and national level, they are not accurate at the district and individual school level. The North Carolina Department of Public Instruction (NCDPI) uses 8th month twelfth-grade membership rather than actual numbers of graduates. Whenever the actual number of graduates is known, WCPSS uses that count to calculate participation rates, dividing the number of senior students who took the SAT by the size of the graduating class for the district and for each high school.

Figure 4
WCPSS SAT Totals by Gender, 1998-2010

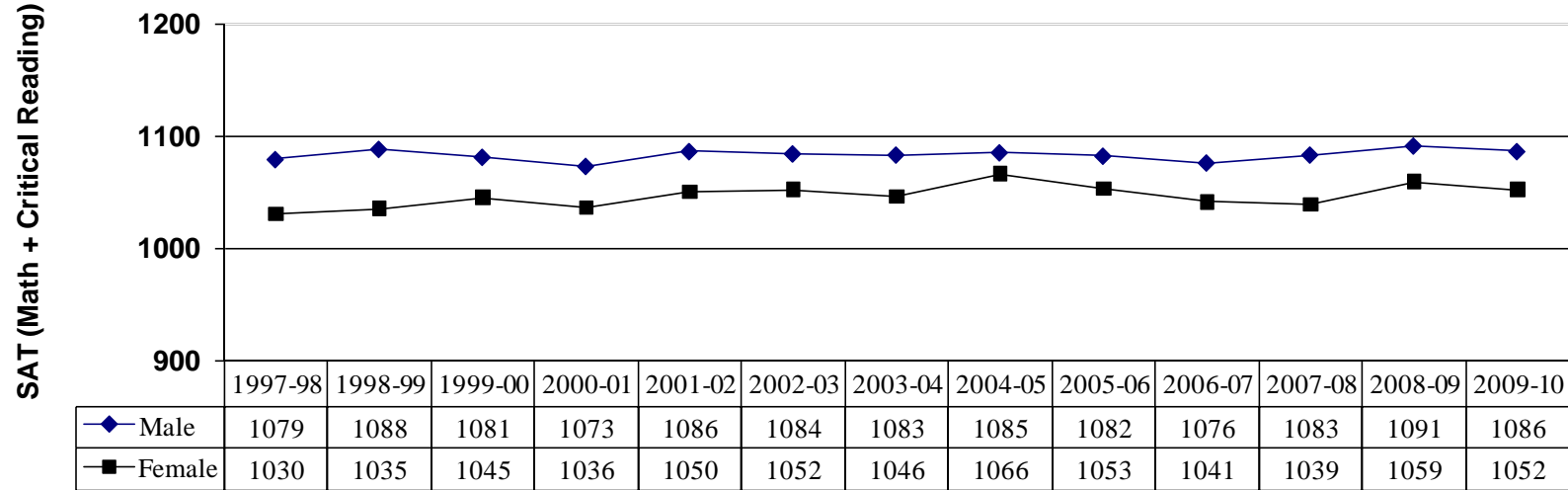
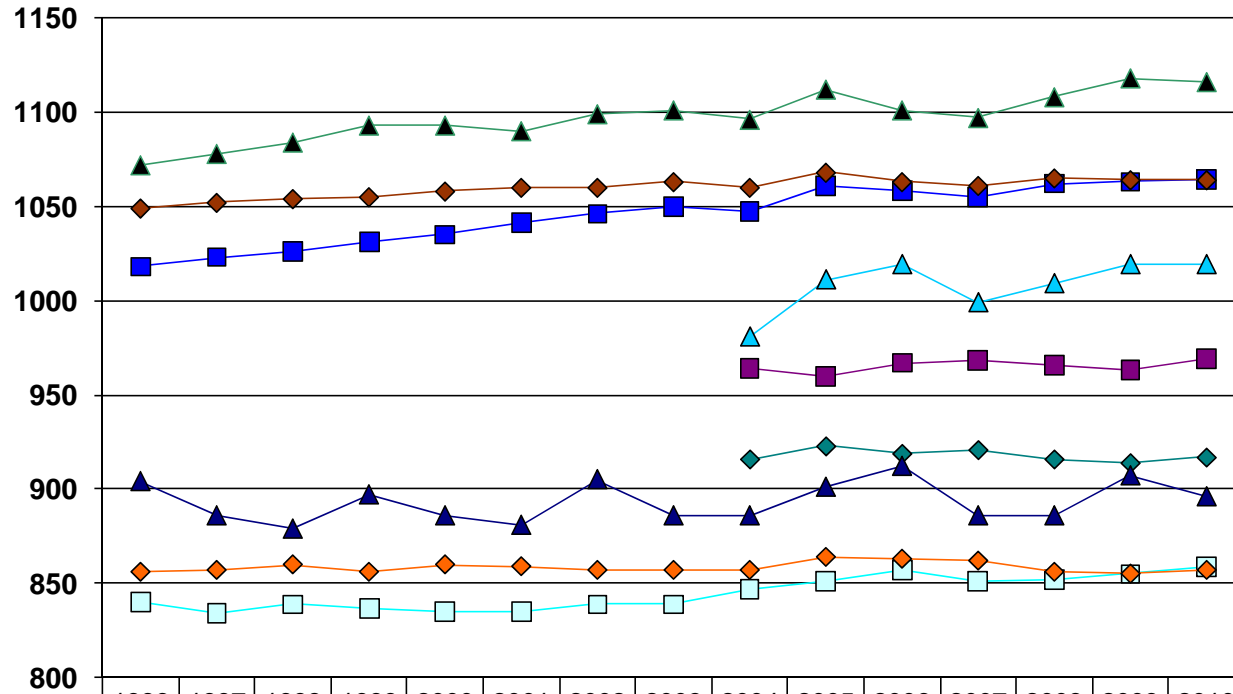


Figure 5
WCPSS SAT by Ethnicity, 1996-2010



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
▲ WCPSS White	1072	1078	1084	1093	1093	1090	1099	1101	1096	1112	1101	1097	1108	1118	1116
■ NC White	1018	1023	1026	1031	1035	1041	1046	1050	1047	1061	1058	1055	1062	1063	1064
◆ USA White	1049	1052	1054	1055	1058	1060	1060	1063	1060	1068	1063	1061	1065	1064	1064
▲ WCPSS Hispanic									981	1011	1019	999	1009	1019	1019
■ NC Hispanic									964	960	967	968	966	963	969
◆ USA Hispanic									916	923	919	921	916	914	917
▲ WCPSS Black	904	886	879	897	886	881	905	886	886	901	912	886	886	907	896
□ NC Black	840	834	839	837	835	835	839	839	847	851	857	851	852	855	859
◆ USA Black	856	857	860	856	860	859	857	857	857	864	863	862	856	855	857