



MEASURING UP

WAKE COUNTY PUBLIC SCHOOLS

EVALUATION AND RESEARCH DEPARTMENT

1997-98 End of Course Testing Results

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End-of-Course (EOC) test scores in the Wake County Public School System in 1997-98 showed small improvements over 1996-97, with average scores slightly higher on all nine EOC multiple-choice tests. In contrast, the percentage of students scoring at least 3.0 on a six point scale on the English II Writing test declined from 64.7% to 53.1%.

Background

North Carolina began implementing End of Course (EOC) tests in the 1985-86 school year with the first administration of the Algebra I test. Other high school subject tests were added over time until the program included 10 multiple choice tests (Algebra I, Algebra II, Geometry, English I, US History, Economic/Legal/Political Systems, Biology, Chemistry, Physical Science, and Physics) and one writing test (English II). EOC tests are aligned with the standard Course of Study in each of the areas tested.

In 1995-96, under the ABCs plan, statewide-required EOC testing was reduced to Algebra I, English I, Biology, ELP, US History, and English II. Tests in these courses have been revised in recent years to place a stronger emphasis on higher-order thinking skills. Tests in five other subjects can be administered at the option of local school systems. WCPSS used four of the local option tests in 1997-98, choosing not to administer the physical science test.

The multiple choice tests must be given during the last two weeks of the course. The writing test is administered during the second semester of English II.

When compared to the prior year, the average scores on all multiple-choice tests increased, with the highest increase in Biology where the average scale score increased 1.2 points. See Figure 2 for a comparison on the five required tests. The smallest increase was in Physics, up 0.1 point.

The English II writing test is holistically scored on a six point scale. A score of 3 or higher has been established by the State Board of Education as adequate to demonstrate mastery of course subject matter and adequate preparation for more advanced coursework. In 1997-98, 53.1% of WCPSS English II students scored 3 or higher, exceeding statewide results of 46.5%, but falling far short of 1996-97, when 64.7% of WCPSS English II tests were 3 or higher.

Six tests were required statewide in 1997-98 for the ABC Program's accountability measures. This was the first year that the new high school model was used in the ABC plan. Student achievement was measured through results on the five required multiple-choice EOC tests and the English II Writing test, and the percentage of students who graduated completing College Prep or College Tech Prep courses of study.

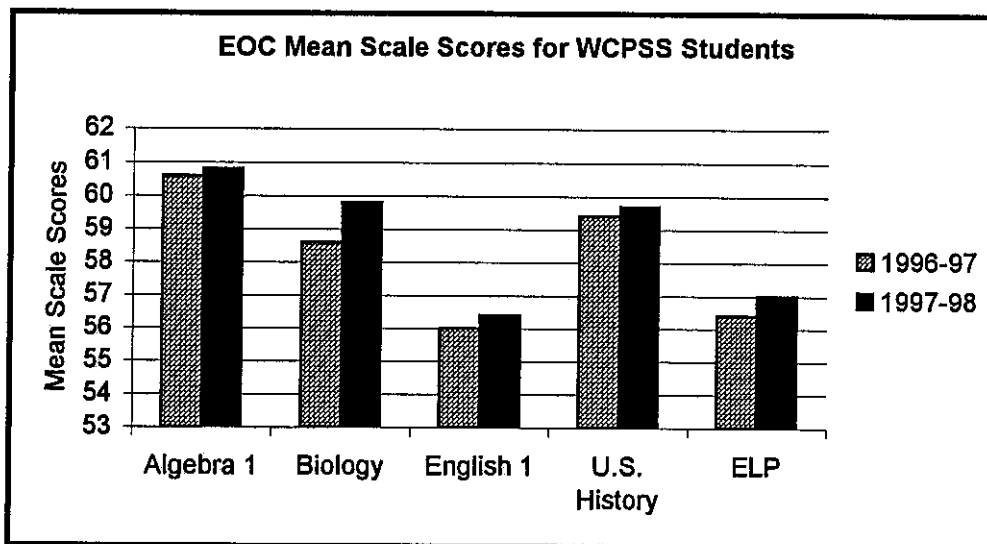
Four local option EOC tests were given in WCPSS in 1997-98 in courses that are not required for graduation (Physics, Chemistry, Geometry, and Algebra II).

Figure 1: Mean Scale Scores For Five Required Multiple-Choice EOC Tests

School	Algebra I		Biology		English I		ELP		US History	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
NC	55.6	57.1	55.9	56.2	53.2	53.6	53.8	54.7	56.2	56.3
WCPSS	60.6	60.8	58.6	59.8	56.0	56.4	56.4	57.0	59.4	59.7
Comprehensive High Schools:										
Apex	59.3	60.5	59.7	59.8	57.3	58.4	58.1	58.4	60.6	61.4
Athens	60.3	60.8	58.9	59.5	56.3	56.5	56.1	57.2	58.7	59.0
Broughton	54.9	53.6	57.4	61.2	56.1	57.3	55.3	56.8	59.7	59.5
Cary	59.3	59.5	58.6	60.1	56.7	56.9	58.3	59.7	60.3	61.2
East Wake	58.1	58.8	54.5	55.2	52.8	52.9	52.9	53.5	56.2	57.5
Enloe	54.0	54.9	62.1	62.9	59.6	59.4	58.9	60.2	61.9	61.7
*Fuquay	55.6	57.7	57.2	57.4	54.1	53.1	55.0	55.5	57.1	57.7
Garner	56.3	57.1	56.8	60.9	53.8	53.8	54.2	53.9	56.1	57.5
Leesville	59.6	60.4	61.4	61.8	57.3	57.8	58.0	59.0	61.6	61.4
Millbrook	54.8	55.0	59.9	60.6	55.8	55.7	55.3	55.4	59.5	60.3
Sanderson	57.3	57.8	59.0	59.2	56.4	56.2	57.4	56.4	59.8	59.9
*SE Raleigh	NA	59.7	NA	59.4	NA	57.7	NA	55.8	NA	57.2
Wake Forest	56.1	56.8	56.1	56.3	54.5	55.0	56.2	56.2	60.2	60.5
Alternative High School:										
*Phillips	51.5	53.6	55.3	50.2	45.5	51.2	48.5	51.1	51.2	50.2

*All courses at Fuquay-Varina, Phillips, and Southeast Raleigh High reflect the combined fall and spring test administration for block scheduled courses.

Figure 2: A Two-Year Comparison of Scale Scores for Five Required Multiple-Choice EOC Tests



Five "Local Option" EOC multiple-choice tests were available to North Carolina school districts in 1997-98. WCPSS chose to administer four of the tests: Geometry, Algebra II, Chemistry, and Physics. Scoring of the tests was revised by the NC Department of Public Instruction, and results were reported as scale scores. Figure 3 shows the mean scale scores achieved by WCPSS students for the past two years.

Figure 3: Mean Scores For Four Local Option Multiple-Choice EOC Tests

School	Geometry		Algebra II		Chemistry		Physics	
	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98	1996-97	1997-98
WCPSS	62.0	62.2	63.6	64.1	60.1	60.7	58.7	58.8
Apex	65.0	65.3	68.0	70.3	62.5	62.8	60.0	62.3
Athens	62.7	63.5	65.0	63.7	61.9	63.1	59.8	59.3
Broughton	64.6	63.6	62.2	62.3	60.3	61.4	60.4	59.1
Cary	63.4	63.4	65.7	66.4	59.8	60.3	57.6	56.1
East Wake	58.3	60.3	61.0	61.8	56.5	55.9	59.0	52.7
Enloe	60.0	62.1	64.7	65.1	60.8	62.2	60.4	60.7
Fuquay	56.5	57.7	58.0	56.5	58.9	57.9	58.5	55.7
Garner	57.5	57.7	62.0	65.6	59.7	57.0	60.5	61.8
Leesville	64.8	62.8	65.6	66.1	62.6	64.2	59.5	60.0
Millbrook	59.9	60.3	62.1	62.9	61.3	63.2	57.0	59.3
Sanderson	62.7	60.7	62.1	62.7	59.9	62.2	57.3	56.6
SE Raleigh	NA	59.5	NA	66.3	NA	58.7	NA	55.2
Wake Forest	60.6	60.8	62.4	62.4	53.6	52.8	51.0	55.0
Alt. School								
Phillips	NA	NA	NA	62.4	NA	NA	NA	NA

English II Writing Test

The purposes of the English II tests are to assess students' mastery of writing, application of grammatical skills, and achievement in literary analysis. Although four types of writing (argumentative, descriptive, expository, and narrative) are assessed in each English II classroom, students responded to a common prompt and to one of several variable prompts that required them to demonstrate a variety of thinking and communicating skills.

The common prompt was scored for content by two independent, trained readers using a six-point, focused holistic scoring method. One trained reader also scored the common prompt essay for conventions using an analytic method which assesses student proficiency in the areas of sentence formation, usage, mechanics, and spelling.

Figure 4 shows a summary of high school students' performance on the common prompt from the 1997-98 English II test. The column labeled ">=3.0" represents the percentage of students scoring at a level defined by the NC Department of Public Instruction as indicating consistent "master of course subject matter and skills." Students scoring 3.0 or higher are considered to be "well prepared for a more advanced level in the content area."

Figure 4: 1997-98 English II Writing Test Results

Total Tested	Value	>=3.0	6.0	5.5	5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0	Off Topic	Blank
79,694	Number	46,576	56	30	809	652	6,541	4,307	24,646	9,312	22,030	32,330	66,521	19	11,955	210
5,482	Percent	53.1%	0.0%	0.0%	0.8%	0.8%	8.2%	4.3%	35.9%	11.9%	25.9%	4.1%	7.5%	0.0%	0.3%	0.4%
	Number	2,912	3	1	100	52	601	344	1,811	654	1,455	156	260	0	33	12
Comprehensive High Schools:																
534	Percent	54.7%	0.2%	0.0%	1.7%	0.9%	9.7%	6.2%	36.0%	12.2%	27.9%	0.9%	3.6%	0.0%	0.6%	0.2%
	Number	292	1	0	9	5	52	33	192	65	149	5	19	0	3	1
409	Percent	55.5%	0.0%	0.0%	1.0%	0.2%	12.2%	9.5%	32.5%	13.4%	23.2%	2.2%	4.4%	0.0%	1.2%	0.0%
	Number	227	0	0	4	1	50	39	133	55	95	9	18	0	5	0
375	Percent	60.5%	0.0%	0.0%	2.9%	0.8%	13.3%	2.9%	40.5%	7.2%	23.5%	2.4%	6.1%	0.0%	0.3%	0.0%
	Number	227	0	0	11	3	50	11	152	27	88	9	23	0	1	0
470	Percent	55.3%	0.0%	0.0%	0.4%	1.1%	13.4%	6.2%	34.3%	13.0%	25.3%	1.5%	4.5%	0.0%	0.2%	0.2%
	Number	261	0	0	2	5	63	29	161	61	119	7	21	0	1	1
354	Percent	41.2%	0.0%	0.0%	1.4%	0.0%	5.1%	2.8%	31.9%	10.5%	42.1%	2.0%	2.5%	0.0%	1.1%	0.6%
	Number	146	0	0	5	0	18	10	113	37	149	7	9	0	4	2
339	Percent	59.3%	0.0%	0.0%	0.3%	1.4%	8.9%	3.5%	44.4%	12.1%	19.9%	3.7%	5.9%	0.0%	0.0%	0.0%
	Number	201	0	0	1	5	31	12	152	39	68	12	19	0	0	0
534	Percent	75.1%	0.2%	0.2%	6.2%	1.5%	23.2%	6.2%	37.6%	5.2%	15.5%	0.9%	2.4%	0.0%	0.7%	0.0%
	Number	401	1	1	33	8	124	33	201	28	83	5	13	0	4	0
376	Percent	44.9%	0.0%	0.0%	0.8%	2.7%	6.1%	9.6%	25.8%	22.6%	25.3%	3.5%	2.7%	0.0%	0.8%	0.3%
	Number	169	0	0	3	10	23	36	97	85	95	13	10	0	3	1
509	Percent	58.2%	0.2%	0.0%	4.1%	0.8%	15.9%	8.3%	28.9%	8.4%	25.5%	3.7%	2.9%	0.0%	1.2%	0.0%
	Number	296	1	0	21	4	81	42	147	43	130	19	15	0	6	0
444	Percent	45.9%	0.0%	0.0%	1.4%	1.6%	9.2%	7.9%	25.9%	14.2%	30.2%	3.2%	5.2%	0.0%	0.7%	0.7%
	Number	204	0	0	6	7	41	35	115	63	134	14	23	0	3	3
424	Percent	59.4%	0.0%	0.0%	0.5%	0.7%	10.8%	10.6%	36.8%	13.0%	20.5%	2.8%	4.0%	0.0%	0.2%	0.0%
	Number	252	0	0	2	3	46	45	156	55	87	12	17	0	1	0
265	Percent	43.0%	0.0%	0.0%	0.0%	0.0%	4.2%	3.4%	35.5%	12.5%	27.2%	6.1%	10.2%	0.0%	0.0%	1.2%
	Number	114	0	0	0	0	11	9	94	33	72	16	27	0	0	3
368	Percent	30.2%	0.0%	0.0%	0.8%	0.3%	2.4%	2.7%	23.9%	15.2%	40.5%	6.0%	7.6%	0.0%	0.3%	0.3%
	Number	111	0	0	3	1	9	10	88	56	149	22	28	0	1	1
Alternative Schools:																
79	Percent	15.2%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	11.4%	6.6%	53.6%	8.3%	17.1%	0.0%	0.9%	0.0%
	Number	12	0	0	0	0	2	0	10	7	37	6	16	0	1	0