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ABSTRACT

The North Carolina Open-Ended Assessment for grades 5 and 8 emphasizes higher-level thinking skills. Test items commonly require the integration of knowledge and skills from more than one curricular area. Beginning in 1996-97, the North Carolina Open-Ended Assessment was administered to students in grades 5 and 8 for the second time. Because it is administered in the fall, the assessment measures skills and knowledge for grades 4 and 7. Each open-ended test is built around a reading passage or passages with test items that are loosely linked to the content of the passage. Each test contains six mathematics and six reading items. For scoring purposes, there is a general rubric for reading and another for mathematics. In November 1997, an equating study was conducted to ensure that test forms are comparable from year to year. Fifth graders in 1997-98 scored slightly higher than grade-5 students from the previous year on the total scale score, with most of the increase occurring in mathematics. The mean total scale score for all ethnic groups improved, although White students outperformed Blacks, and Asian American students outperformed Whites. In grade 8, students slightly outperformed those of the previous year, with the gain in reading a little higher than the gain in mathematics. White and Asian American students were more likely to score in the higher achievement levels. Tables present mean scale scores for both grades in both subjects, data on average performances of students by ethnicity, disability, Title I participation, and local education agency. Frequency distributions and percentiles are presented for both grades and both subjects. Appendixes contain sample student reports and a list of the state's charter schools. (Contains 20 tables and 7 figures.) (SLD)

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# The 1997-98 Report of Student Performance

ED 425 179

# North Carolina Open-Ended Assessment

TM029242

## Grades 5 and 8

**Public Schools of North Carolina**  
State Board of Education  
Department of Public Instruction  
Division of Accountability Services/ Testing Section  
Raleigh, North Carolina 27601-2825

Published May 1998

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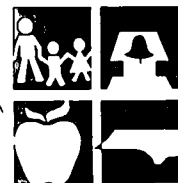
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**1997-1998 Report of Student Performance  
North Carolina Open-Ended Assessment  
Grades 5 and 8  
Table of Contents**

Background .....	1
Who is administered the test? .....	1
What is the format of the test? .....	2
How are the tests scored? .....	2
What are the general rubrics for reading and mathematics? .....	3
How are scores reported? .....	3
Equating Study .....	5
1997-98 State-level Open-Ended Assessment Results.....	5
Grade 5 .....	6
Grade 8 .....	7
Total Mean Scale Scores for Grade 5.....	9
Total Mean Scale Scores for Grade 8.....	10
Reading Mean Scale Scores for Grade 5.....	11
Reading Mean Scale Scores for Grade 8.....	12
Mathematics Mean Scale Scores for Grade 5 .....	13
Mathematics Mean Scale Scores for Grade 8 .....	14
Percent of Students at Each Achievement Level Reading <u>and</u> Mathematics Grade 8	
by Ethnicity .....	15
by Disability .....	17
Average Performance of Students with Disabilities or Limited English Proficiency	
Grades 5 and 8.....	19
Average Performance of Students Taking Modified Tests	
Grades 5 and 8.....	20
Average Performance of Students Participating in a Title I Program	
Grades 5 and 8.....	21
1997-98 Open-Ended Assessment for Grades 5 and 8	
LEA and Charter School Performance by Region .....	23
Mean Scale Scores for Grade 5 by LEA .....	33
Mean Scale Scores for Grade 8 by LEA .....	34
1997-98 Open-Ended Assessment for Grades 5 and 8	
State-level Summary Statistics.....	35
Frequency Distributions and Percentiles for Grade 5 Reading .....	37
Frequency Distributions and Percentiles for Grade 5 Mathematics.....	39
Frequency Distributions and Percentiles for Grade 5 Total Scale Scores.....	40
Frequency Distributions and Percentiles for Grade 8 Reading .....	41
Frequency Distributions and Percentiles for Grade 8 Mathematics.....	43
Frequency Distributions and Percentiles for Grade 8 Total Scale Scores.....	44
1997-98 Open-Ended Assessment for Grades 5 and 8	
State-level Score Point Distribution by Item.....	45

**1997-1998 Report of Student Performance  
North Carolina Open-Ended Assessment  
Grades 5 and 8  
Table of Contents (continued)**

1997-98 Open-Ended Assessment for Grades 5 and 8	
Goals and Thinking Skills Measured .....	49
1997-98 Open-Ended Assessment for Grades 5 and 8	
Copies of the Grade 5 and 8 Open-Ended Tests .....	53
Student Performance at Grade 5.....	55
Student Performance at Grade 8.....	69
Appendix .....	81
Sample Individual Student Report Grade 5.....	83
Sample Individual Student Report Grade 8.....	85
List of Charter Schools.....	87

# 1997-1998 Report of Student Performance

## North Carolina Open-Ended Assessment

### Grades 5 and 8

#### Background

The North Carolina Open-Ended Assessment Grades 5 and 8, like the North Carolina *Standard Course of Study*, places an emphasis on higher level thinking skills—the ability of students to access, organize, process, analyze, evaluate and apply information to solve real-world problems and make informed decisions. The assessment requires students to apply or demonstrate skills and knowledge beyond the recall level on challenging subject matter. Test items commonly require the integration of knowledge and skills from more than one curricular area. Instead of choosing from a list of provided possible answers, students are required to generate their responses and write out their thoughts. Often the quality of a student's response is judged by the level of the student's explanation.

Open-ended assessment was initially implemented in 1992-93 in North Carolina at grades 3-8. The tests contained a balanced number of questions in reading, mathematics, and social studies for a total of 10 questions. The tests were scored centrally by teachers during the summer and were designed to inform instruction. No individual student scores were provided from the earlier versions of open-ended assessment. In 1995 with the onset of the ABCs Plan to reform public education, a decision was made to reduce the amount of testing. Open-ended assessment was suspended during the 1995-96 school year to allow for planning and revision of the assessment to focus on more challenging subject matter. The more challenging open-ended assessment represents a higher standard that focuses on what students should know and should be able to do instead of what they know and are able to do.

Beginning in 1996-97, the North Carolina Open-Ended Assessment was administered to students at grades 5 and 8 on a designated date in November. Because it is administered in the fall, the assessment at grade 5 measures skills and knowledge for grade 4 and the assessment at grade 8 measures skills and knowledge for grade 7. The assessment focuses on the content of a passage and emphasizes reading, mathematics, and writing. Skills from the social studies and science curricula are integrated into mathematics and reading. Typically one test form is administered at each grade level. The test administration time allowed is 90 minutes.

#### Who is administered the test?

All public school students, including charter schools committed to the ABCs accountability plan, enrolled in grades 5 and 8 participate in the open-ended assessment unless they are specifically exempted. For the first time, the state report includes performance of charter school students in the state results as well as individual charter school performance. North Carolina's first charter schools were approved by the State Board of Education in March 1997.

**What is the format of the test?**

Each open-ended test is built around a reading passage or passages with test items that are loosely linked to the content of the passage. The passage or passages may include a variety of genres and writing for different purposes. Students may be directed to respond to open-ended items by:

- Constructing a response
- Writing sentences
- Designing brochures
- Explaining an author's purpose
- Solving problems
- Constructing tables, charts, or graphs
- Interpreting data
- Analyzing information
- Writing a short essay

Each test consists of 12 items—six reading and six mathematics. Students are required to respond to the items in the spaces provided in the test books. While the content of the mathematics items is linked to the reading passage, the items are not dependent on an understanding of the content of the passage. These items consistently measure the mathematics goals and strands as independent items. Social studies and science skills and content are embedded within some of the reading and mathematics items.

The reading section of the grade 5 test contains an item that requires descriptive writing; the grade 8 test contains an item that requires persuasive writing. These items allow for a three-fourths page response, and the scoring rubrics are developed to evaluate reading comprehension, composing, and applied language conventions.

**How are the tests scored?**

Professional scorers were trained to score the open-ended assessments at grades 5 and 8. Data Recognition Corporation (Minneapolis, MN), the contractor in 1996-97, served as the contractor again for the 1997-98 scoring. The scorers used rubrics and scoring guides developed by an advisory group of North Carolina teachers and curriculum specialists. Group and individual student scores along with student tests were returned to the school systems in March 1998.

For scoring purposes, there is a general rubric for reading and a general rubric for mathematics. The use of a general rubric insures that the same level of expectation is maintained for all items within a content area. For example, a score point of two on one reading item should describe the same level of performance as a two on another reading item. In addition to a general rubric, each item has a specific scoring rubric that defines the levels of expectation for the particular item.

The number of score points in a rubric depends on the complexity of the item. Rubrics for items on the open-ended assessment range from two score points on a simple question that requires a convergent response to four score points for the

more complex items that often require substantial elaboration or a more divergent response.

**What are the general rubrics for reading and mathematics?**

The general rubrics provide information regarding the scoring standards used in 1996-97 and 1997-1998. The general rubrics, which remain the same across years and forms, for reading and mathematics items follow.

### **GENERAL RUBRIC**

#### **Reading**

- 0 Answer is unresponsive, unrelated, or inappropriate.
- 1 Answer deals with material on a concrete, literal level that is accurate in most dimensions.
- 2 Answer deals with most aspects of the question and makes correct inferences, although minor errors may exist. Comprehension is on an inferential level and the key skills are synthesis and analysis.
- 3 Answer addresses all aspects of the question and uses sound reasons and cites and explains appropriate examples. Uses skills of evaluation as well as analysis and synthesis.

### **GENERAL RUBRIC**

#### **Mathematics**

- 0 Answer is unresponsive, unrelated, or inappropriate. Nothing correct.
- 1 Addresses item but only partially correct; something correct related to the question.
- 2 Answer deals correctly with most aspects of the question, but something is missing. May deal with all aspects but have minor errors.
- 3 All parts of the question are answered accurately and completely. All directions are followed.

**How are scores reported?**

The results from the open-ended assessment were returned to each school district and charter school during March 1998. Charter schools, individual LEA schools, and LEAs received class rosters, school rosters, and LEA reports. On the individual score report, students received an open-ended total scale score with subscores for reading and mathematics. The graphic for each score shows the scale score obtained with bars to the left and right indicating one standard error of measurement around the score. The length of the bar indicates that the true score will be within this range of scale scores two-thirds of the time.



Student scores provide feedback to teachers for a clearer link between instructional efforts and student performance. In addition, the original student test books and scoring guides are distributed to the teachers. Such feedback should lead to a higher level of performance in this area in the future.

*Raw Scores.*

The modal score on an individual reading question at both grade levels was a raw score point of one. A score point of one is assigned to responses at the concrete, literal level. Few students are reaching the higher scores of two or three. At the higher score points student answers are expected to be more complete, to have clear explanations, and to go beyond the literal level. Also at the higher score points students are expected to provide responses that demonstrate skills in analysis, interpretation, and/or evaluation of ideas and concepts.

In analyzing the mathematics questions, a significant number of students received zeros. A score point of zero is given to responses that contain no information that is correct.

*Scale Scores.*

The scales for the open-ended assessment were derived from the characteristics of the items when they were field tested during the 1995-96 school year. Each of the three scales for each grade (reading, mathematics, and total score) was calibrated to have a mean of 50 and a standard deviation of 10. Table A (below) shows the state statistics for the 1996-97 and 1997-98 administrations of the tests.

**Table A. North Carolina Open-Ended Assessment  
Descriptive Statistics**

Grade	Year	N	Total		Reading		Mathematics	
			Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range
5	1996-97	89,353	47.5 (9.0)	24-91	45.2 (11.6)	9-90	49.9 (8.8)	36-93
	1997-98	91,295	49.8 (9.5)	24-91	46.4 (10.6)	9-90	53.3 (11.5)	36-93
8	1996-97	86,479	48.5 (9.1)	23-87	46.8 (10.0)	12-89	50.0 (10.3)	31-84
	1997-98	87,663	49.7 (10.2)	23-87	47.4 (11.1)	12-89	51.8 (11.7)	31-84

### *Achievement Levels.*

Achievement levels are not available for grade 5 because the test administration is scheduled to move to grade 4 in 1997-1998. The distributions of scale scores and the achievement level ranges from the 1997-1998 assessment at grade 8 are located in Table B below. These achievement level ranges were determined using valuable input from North Carolina language arts/reading and mathematics teachers who participated in the 1997-98 test administration.

**Table B. 1997-1998 North Carolina Open-Ended Assessment  
Grade 8 Achievement Levels and Scale Scores**

Achievement Level	Scale Scores		
	Reading	Mathematics	Total
Level I	12-35	31-36	23-37
Level II	36-44	37-48	38-47
Level III	45-58	49-61	48-59
Level IV	59-89	62-84	60-85

### **Equating Study**

During the November 1997 administration of the North Carolina Open-Ended Assessment, an equating study was conducted to ensure that test forms are comparable from year to year. In order to accomplish this study, approximately one of every twenty-seven students administered the open-ended assessment received a 1996 test form.

### **1997-98 State-level Open-Ended Assessment Results**

This is the second year of the open-ended assessment using the new format; therefore, comparisons can be made only with last year's scores. However, scores continue to be low in comparison to typical student performance on other types of assessment. Students still have difficulty analyzing text, making inferences, and drawing conclusions from what they have read. While students are usually able to read and comprehend at a concrete level, which will give them a score point of one, they have difficulty using the text as support for analysis and evaluation. They have difficulty using the supporting details of the text to go beyond the plot to the abstract. Also, as a part of the reading section, visual or graphic problems are difficult for them.

Whether it is map reading, giving directions, or analyzing artwork, they have difficulty going beyond the literal level. This same problem is evident on the mathematics section. Students have had and continue to have difficulty with problems that require analyzing or creating charts, graphs, or tables. They appear to be unable to analyze the problems step-by-step and often do not attempt to respond. If students would break down the problems into logical parts, the problems would be more manageable, and students would be able to receive at least partial credit. Because many of the reading and mathematics items are multi-level, students need to be encouraged to read the problems carefully and to acquire an understanding of the task before they begin to respond to or to give up attempting a problem.

## Grade Five

Students in grade 5 in 1997-98 scored slightly higher than grade 5 students in 1996-97 (2.3 scale score points on average) on the total scale score. Most of the increase occurred in mathematics. The mean mathematics scale score was 53.3 in 1997-98 compared to 49.8 in 1996-97. The increase in the mean reading scale score from 1996-97 to 1997-98 was 1.2 scale score points (from 45.2 to 46.4).

## Performance of Subgroups at Grade Five

**Gender.** The mean total scale score for females and males improved from 1996-97 to 1997-98 by 2.5 points for females and 2.0 points for males. The 1997-98 mean total scale score for females is 50.7, and the mean total scale score for males is 48.9. On the average, females scored 48.4, while males averaged 44.4 on the reading items. In 1997-98 the difference between females and males on reading was 4.0 points compared to 2.4 in 1996-97. On mathematics items the difference between the average scale score for females and males in 1996-97 and 1997-98 was less than one-half point.

**Ethnicity.** The mean total scale score for all ethnic groups improved from 1996-97 to 1997-98. The mean total scale score for White students is 52.1 compared to 45.0 for Black students, 46.4 for Hispanic students, 45.6 for American Indian students, 52.7 for Asian students, 49.7 for Multi-racial students, and 49.4 for Other students. Compared to 1996-97 results, Asian students had the most gain (3.4 points on average) of any ethnic group in 1997-98.

The average reading scale score for White students is 48.0 while Black students scored 43.1, Hispanic students scored 43.3, American Indian students scored 41.9, Asian students scored 48.5, Multi-racial students scored 46.4, and Other students scored 45.5.

The mean for White students on mathematics is 56.2 compared to 47.0 for Black students, 49.5 for Hispanic students, 49.4 for American Indian students, 56.8 for Asian students, 53.1 for Multi-racial students, and 53.4 for Other students.

*Figure 1 depicts the total scale score at grade 5 by ethnicity and gender. Figure 3 illustrates the mean reading scale score at grade 5 by ethnicity and gender; Figure 5 illustrates the mean mathematics scale score at grade 5 by ethnicity and gender.*

**Exceptionality.** The total mean scale score for all students was 49.8. Academically gifted students scored significantly above the average with a total mean scale score of 61.0. Students with disabilities scored from 2.5 to 14.1 points below the total mean scale score for all students. Section 504 (44.8) and Limited English Proficient (42.7) students also scored below the average for all students.

*Table 3 provides detailed results for exceptional, Section 504, and Limited English Proficient students.*

**Modifications.** Most students receiving modifications scored 2.5 to 7.7 points below the total mean scale score of 49.8 for all students. Students receiving the use of a typewriter or word processor modification, however, scored (49.9) just above the total mean scale score for all students.

*Table 4 provides detailed results for students receiving modifications.*

**Title I.** The mean total scale score for students *not* in a Title I program was 51.1 compared to 47.4 for students in a schoolwide Title I program, 44.2 for students in a target assistance Title I program, and 42.6 for students in a migrant Title I program.

*Table 5 provides detailed results for students participating in Title I programs.*

## Grade Eight

Students in grade 8 in 1997-98 scored slightly higher than grade 8 students in 1996-97 (1.2 scale score points on average) on the total scale score. The gain in reading scores (2.2 scale score points) was slightly higher than the gain in mathematics scores (1.8 scale score points).

## Performance of Subgroups at Grade Eight

**Gender.** The mean total scale score for females and males improved from 1996-97 to 1997-98 by 1.5 points for females and 0.9 points for males. On the average, female students received a total scale score of 51.0; males received a total scale score of 48.4. For the second year in a row, the mean reading scale score for females was significantly higher (49.5 for females vs. 45.3 for males) than males. The main reason for this difference is that females gained 1.1 points on average in reading while males had almost no gain (0.1 points). In mathematics, females and males scored approximately one score point apart in 1996-97 (females 0.9 points higher) and in 1997-98 (females 1.1 score points higher). Females and males had similar increases in their mathematics scores with females increasing 1.9 points on average and males increasing 1.7 points on average.

**Ethnicity.** White students scored a mean total scale score of 52.3 compared to 44.0 for Black students, 45.1 for Hispanic students, 44.4 for American Indian students, 50.7 for Asian students, 49.1 for Multi-racial students, and 48.3 for Other students. White (69.9%) and Asian (59.7%) students scored at achievement level III or IV above the state percent of 58.7. Black (34.9%), Hispanic (42.2%), American Indian (37.8%), Multi-Racial (56.2%), and Other (55.4%) students were all below the percent of all students scoring at achievement level III or IV. Compared to 1996-97 results, White students had the most gain (1.3 points on average) of any ethnic group in 1997-98. This gain is just above the overall increase in scores of 1.2 points.

The mean reading scale score for White students is 49.6 while Black students scored 42.9, Hispanic students scored 42.9, American Indian students scored 42.3, Asian students scored 48.1, Multi-racial students scored 47.4, and Other students scored 45.9.

The average mathematics scale score for White students is 55.0 compared to 44.9 for Black students, 47.2 for Hispanic students, 46.2 for American Indian students, 53.3 for Asian students, 50.8 for Multi-racial students, and 50.6 for Other students.

*Figure 2 illustrates the total scale score at grade eight by ethnicity and gender. Figures 4 and 6 depict the mean reading and mathematics scale scores respectively at grade eight by ethnicity and gender. Figure 7 and Table 1 show the percent of students at each achievement level by ethnicity.*

**Exceptionality.** The total mean scale score for all students was 49.7. Academically gifted students scored significantly above the average with a total mean scale score of 62.0. Students with disabilities scored from 3.7 to 17.4 points below the total mean scale score for all students. Section 504 (44.9) and Limited English Proficient (39.7) students also scored below the average for all students.

*Table 3 provides detailed results for exceptional, Section 504, and Limited English Proficient students.*

**Modifications.** Students receiving modifications scored 3.7 to 12.2 points below the total mean scale score of 49.7 for all students. Of these students, those receiving the use of a typewriter or word processor modification, scored the highest (46.0).

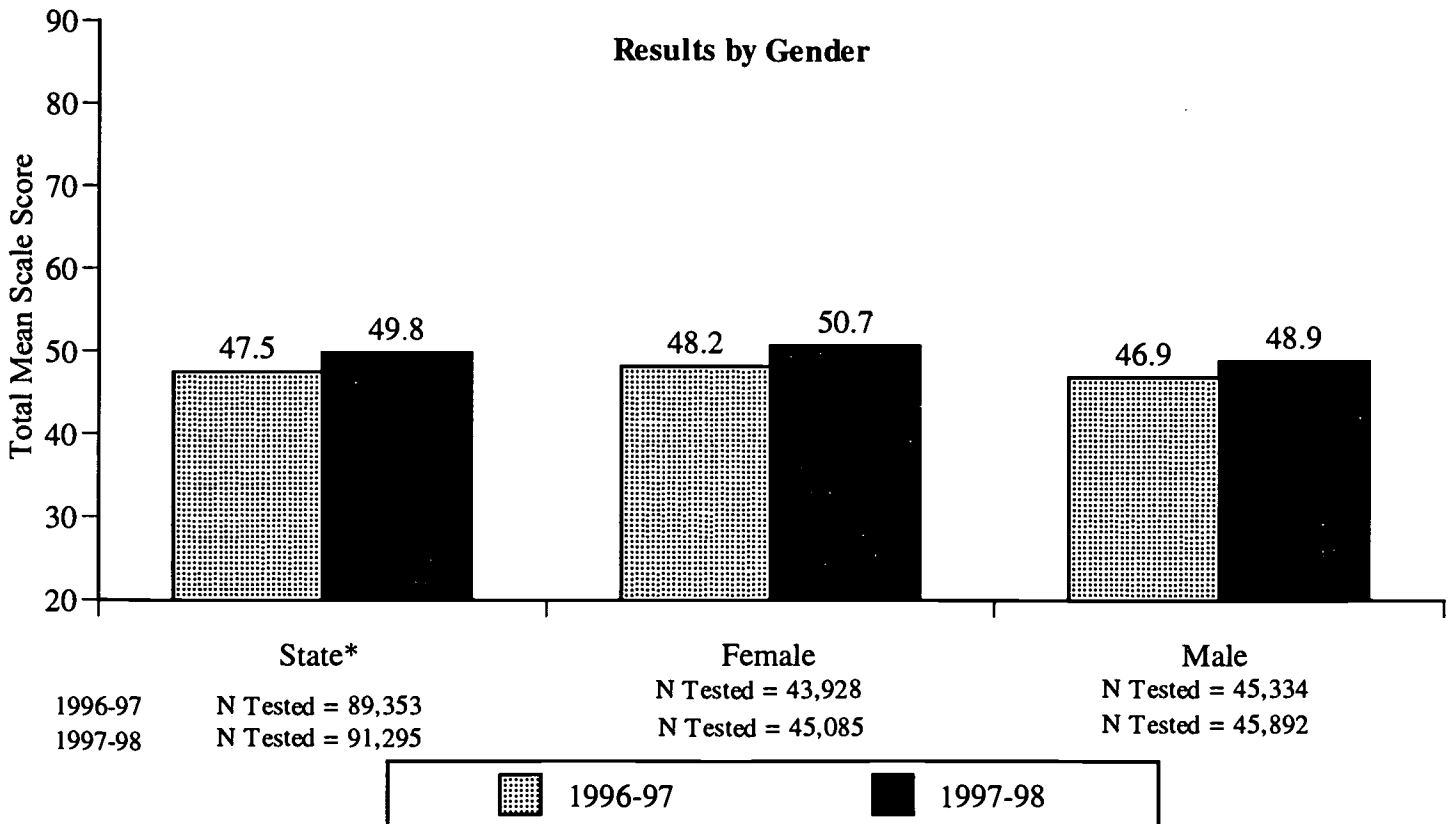
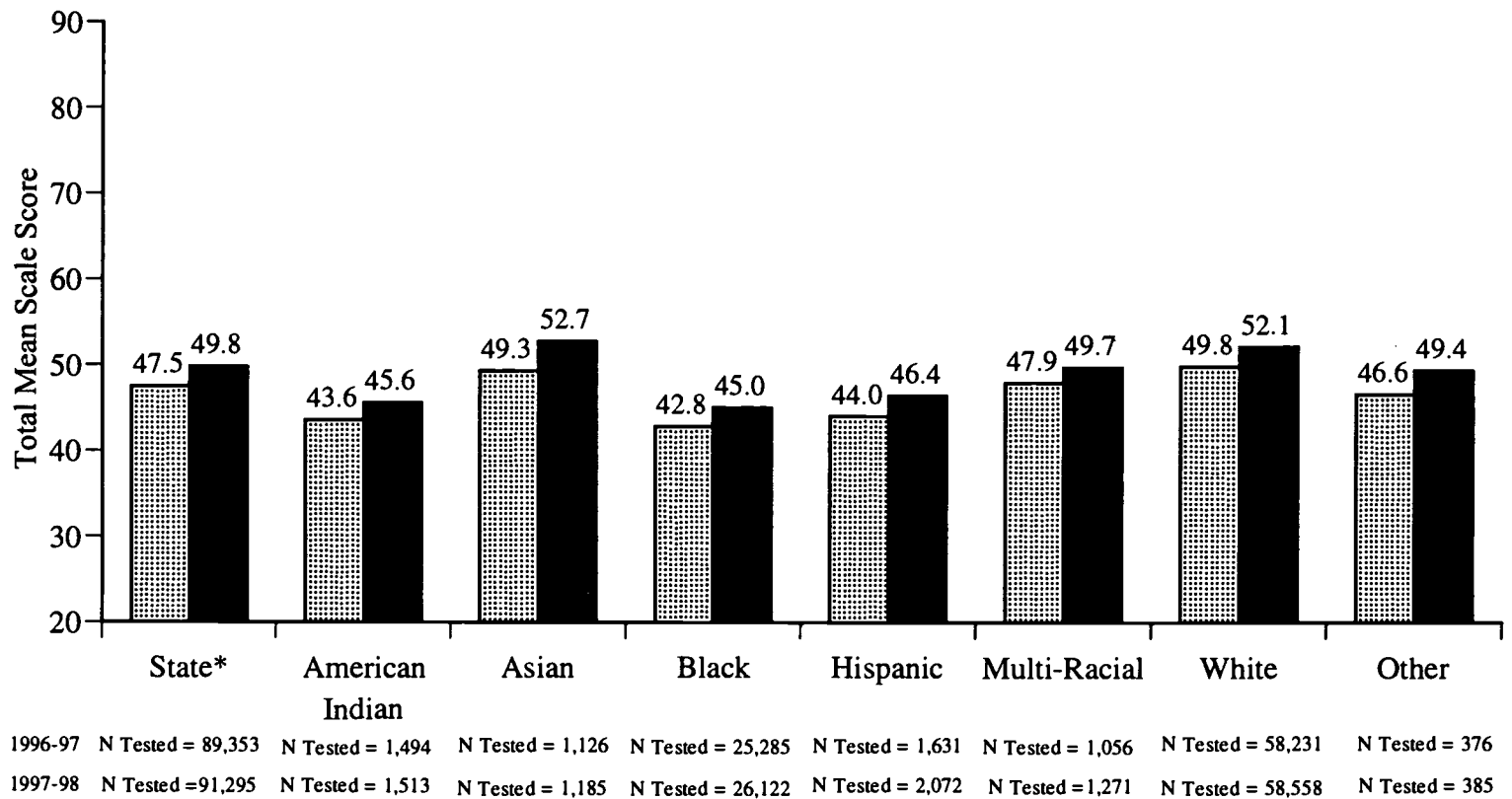
*Table 4 provides detailed results for students receiving modifications.*

**Title I.** The mean total scale score for students *not* in a Title I program was 50.2 compared to 46.5 for students in a schoolwide Title I program, 41.5 for students in a target assistance Title I program, and 40.1 for students in a migrant Title I program.

*Table 5 provides detailed results for students participating in Title I programs.*

**Figure 1. 1996-97 to 1997-98 North Carolina Open-Ended Assessment  
Total Mean Scale Scores  
Grade 5**

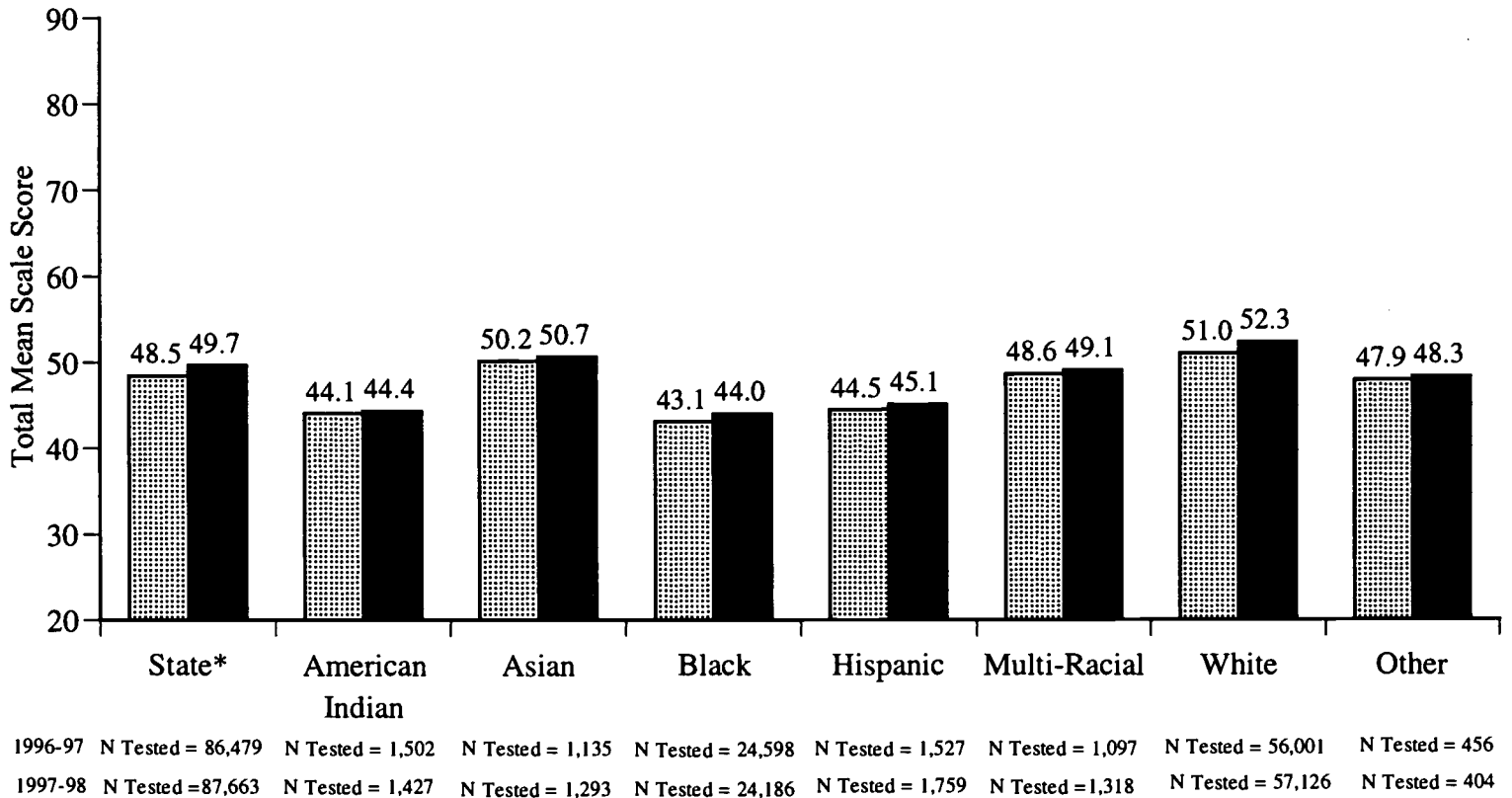
**Results by Ethnic Group**



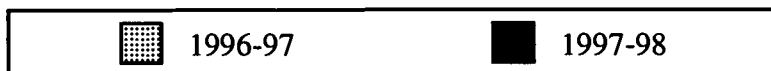
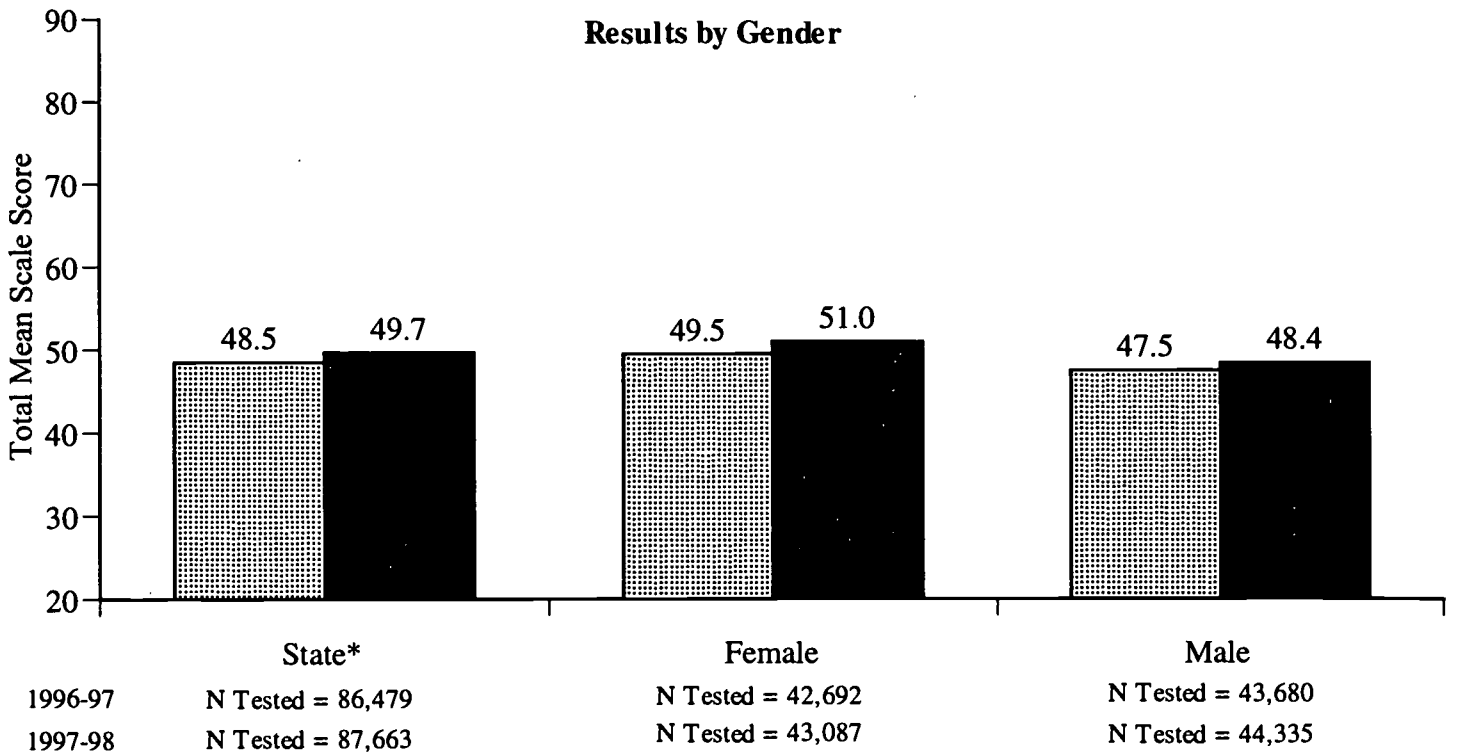
ERIC state includes all public school systems (LEA) and charter schools.

**Figure 2. 1996-97 to 1997-98 North Carolina Open-Ended Assessment  
Total Mean Scale Scores  
Grade 8**

**Results by Ethnic Group**

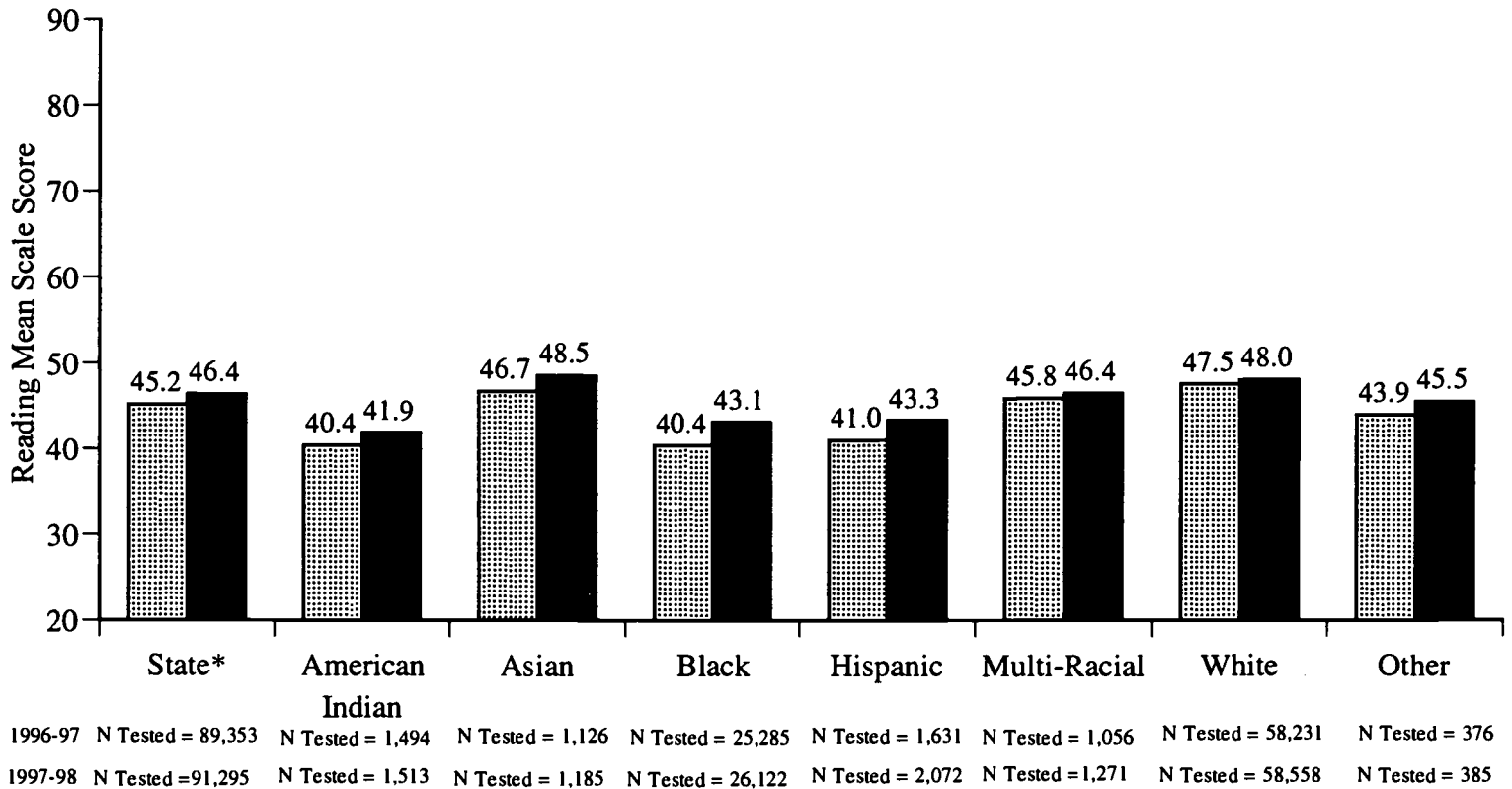


**Results by Gender**

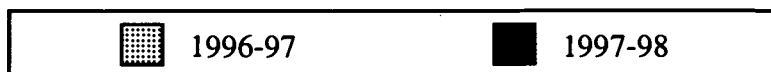
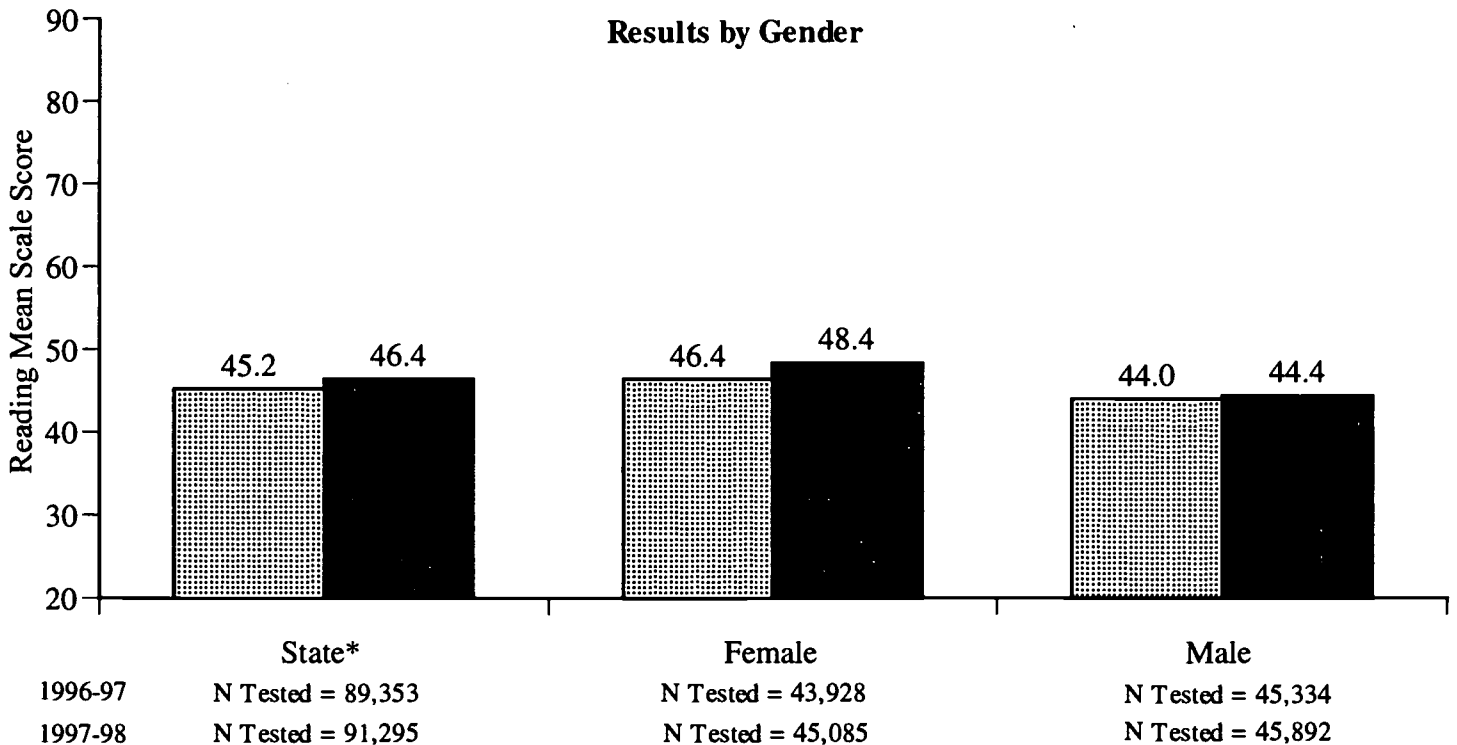


**Figure 3. 1996-97 to 1997-98 North Carolina Open-Ended Assessment  
Reading Mean Scale Scores  
Grade 5**

**Results by Ethnic Group**



**Results by Gender**

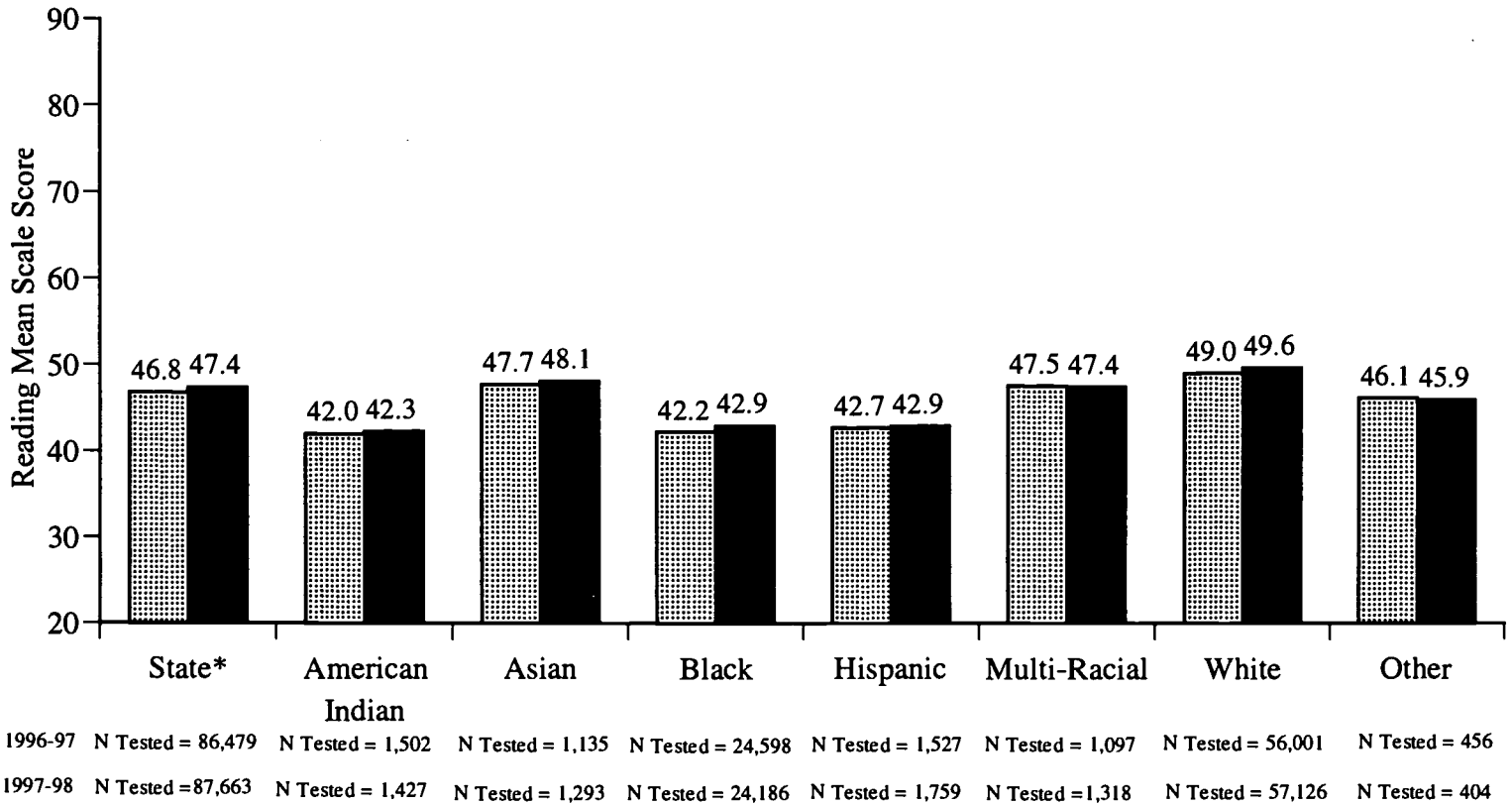


\* State includes all public school systems (LEA) and charter schools.

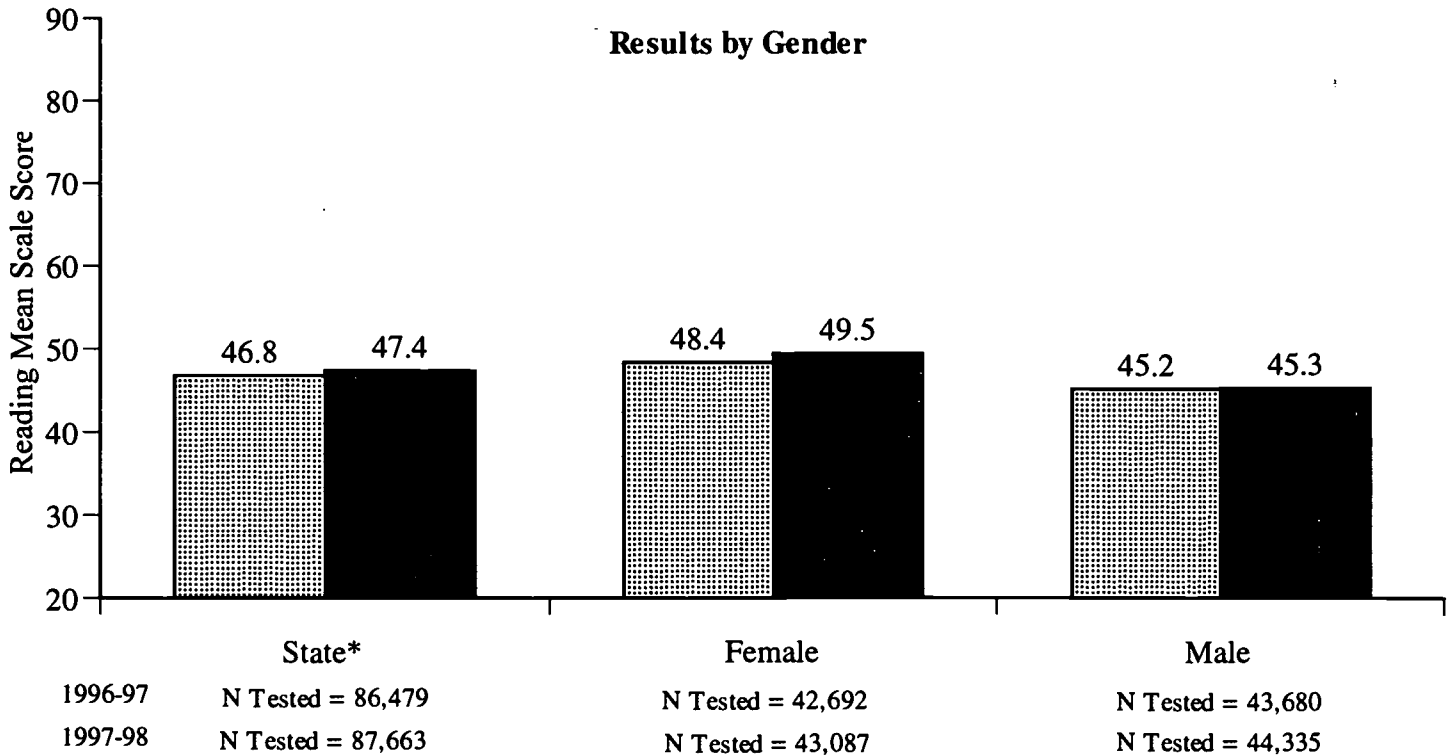


**Figure 4. 1996-97 to 1997-98 North Carolina Open-Ended Assessment  
Reading Mean Scale Scores  
Grade 8**

**Results by Ethnic Group**



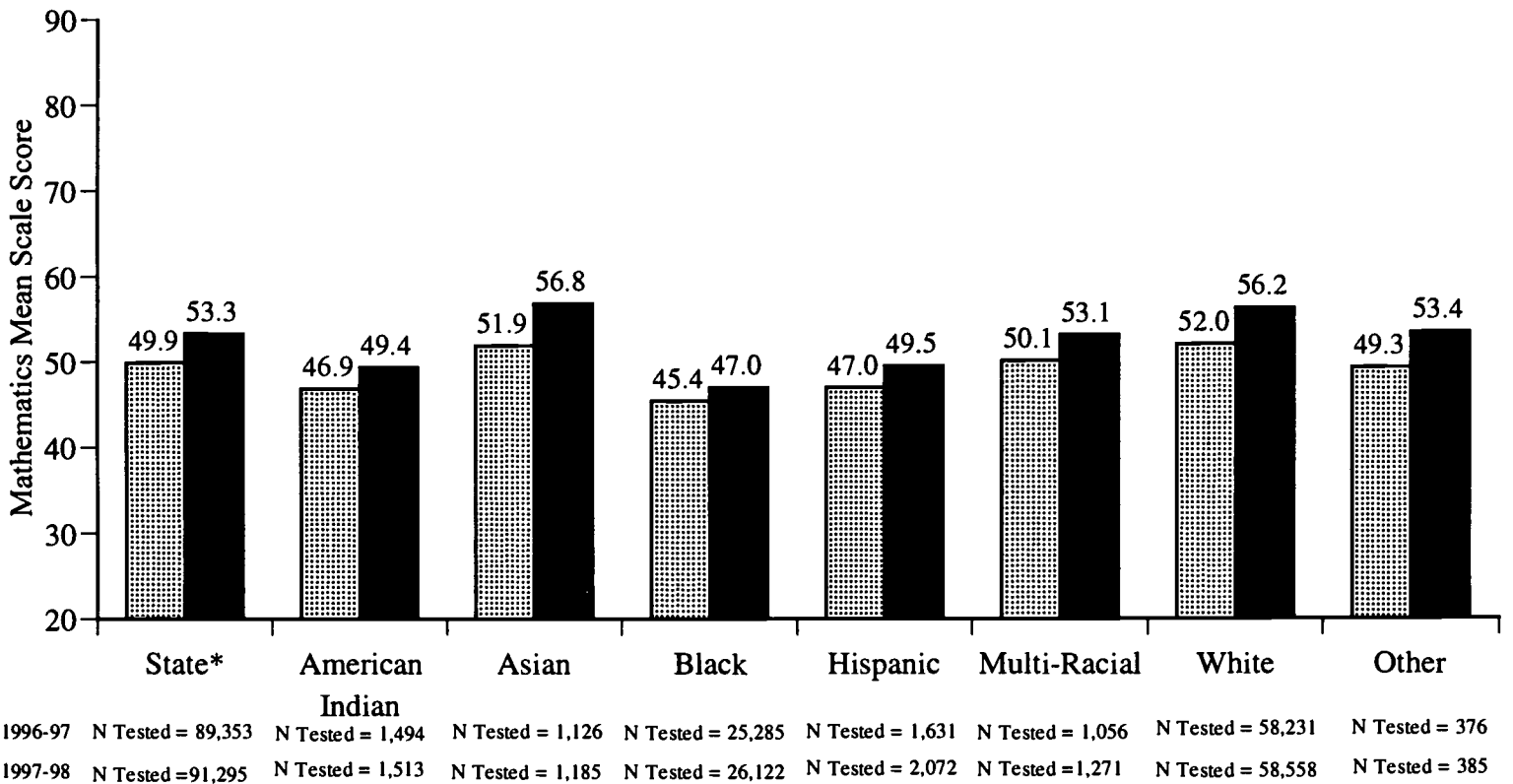
**Results by Gender**



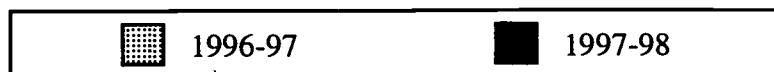
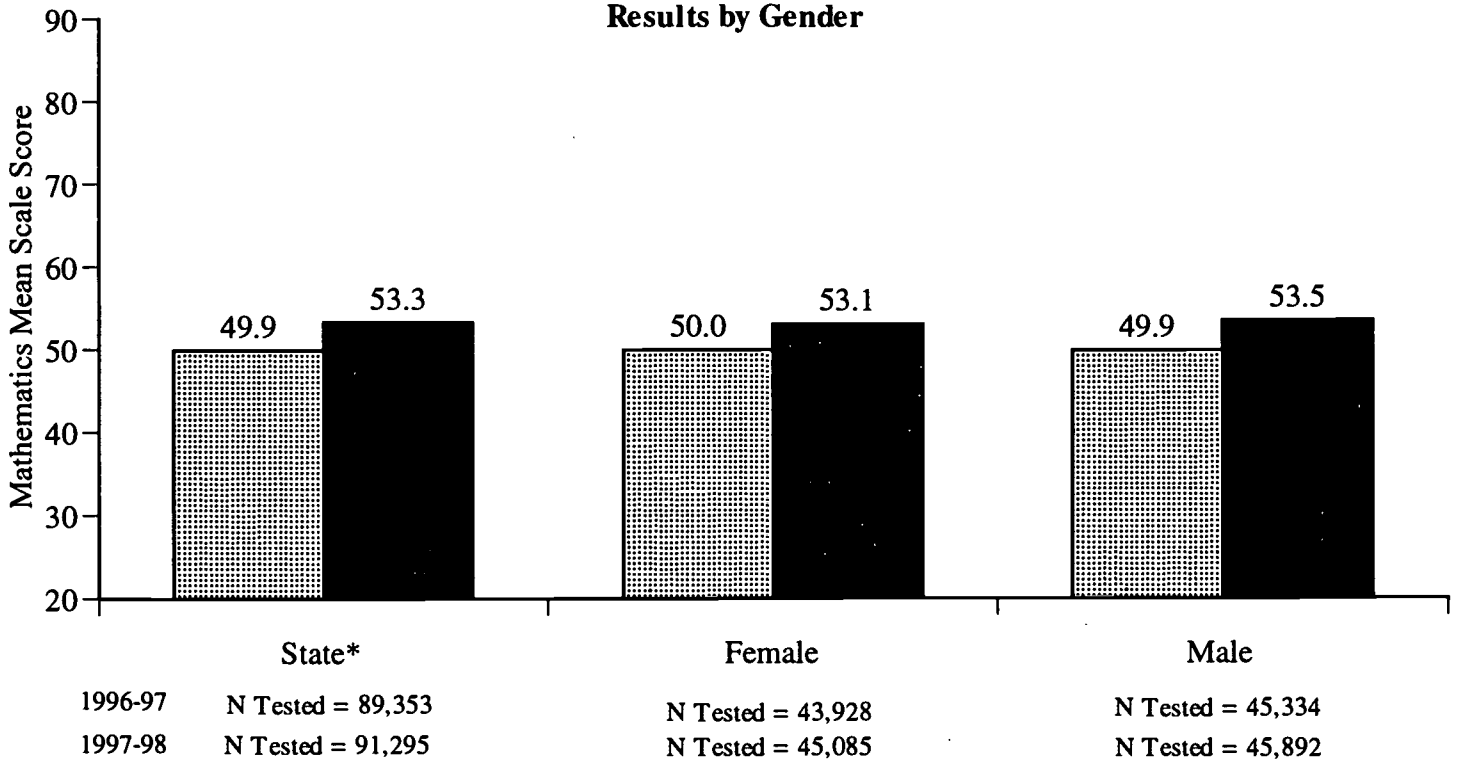
1996-97
  1997-98

**Figure 5. 1996-97 to 1997-98 North Carolina Open-Ended Assessment  
Mathematics Mean Scale Scores  
Grade 5**

**Results by Ethnic Group**

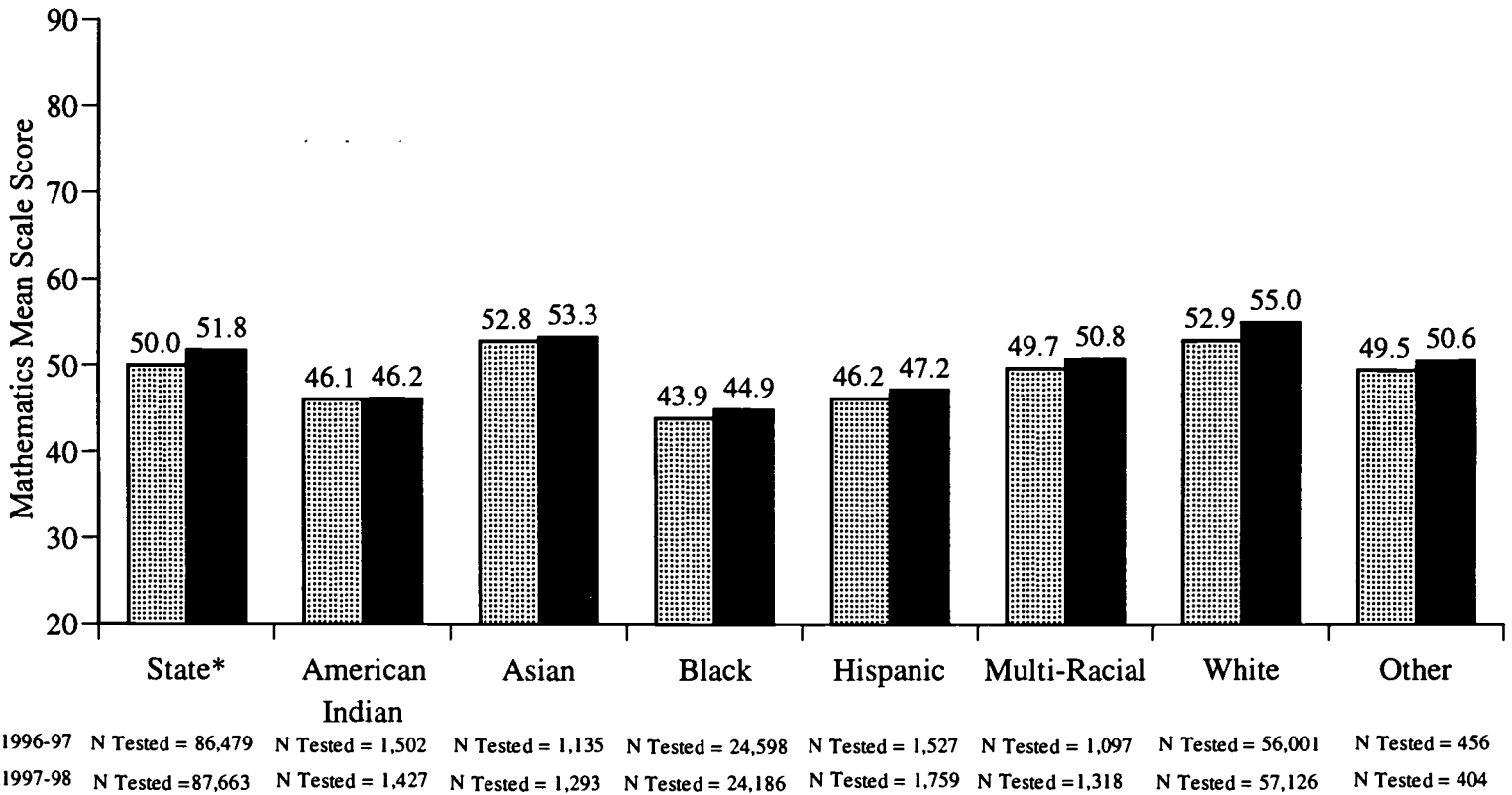


**Results by Gender**

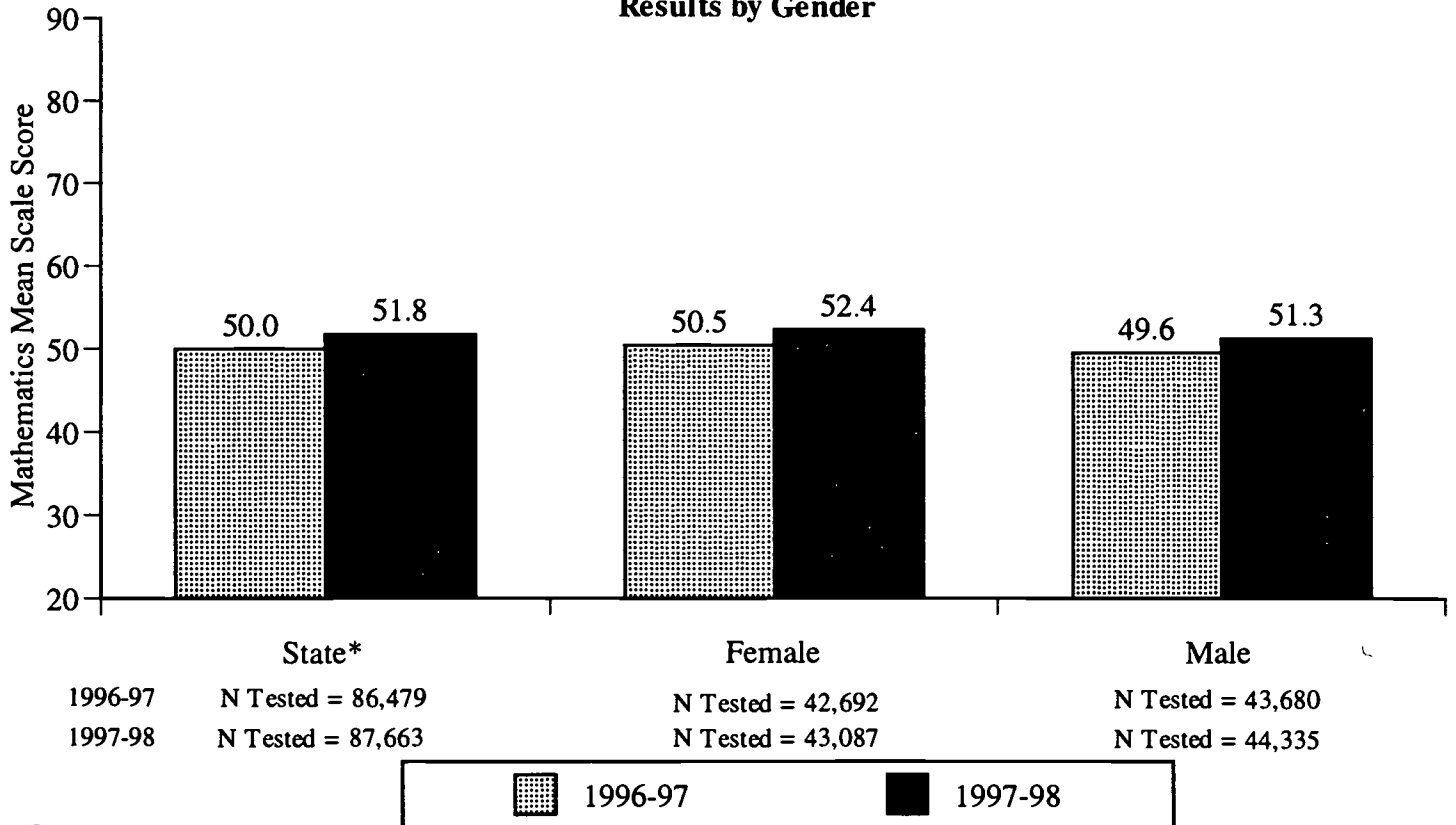


**Figure 6. 1996-97 to 1997-98 North Carolina Open-Ended Assessment  
Mathematics Mean Scale Scores  
Grade 8**

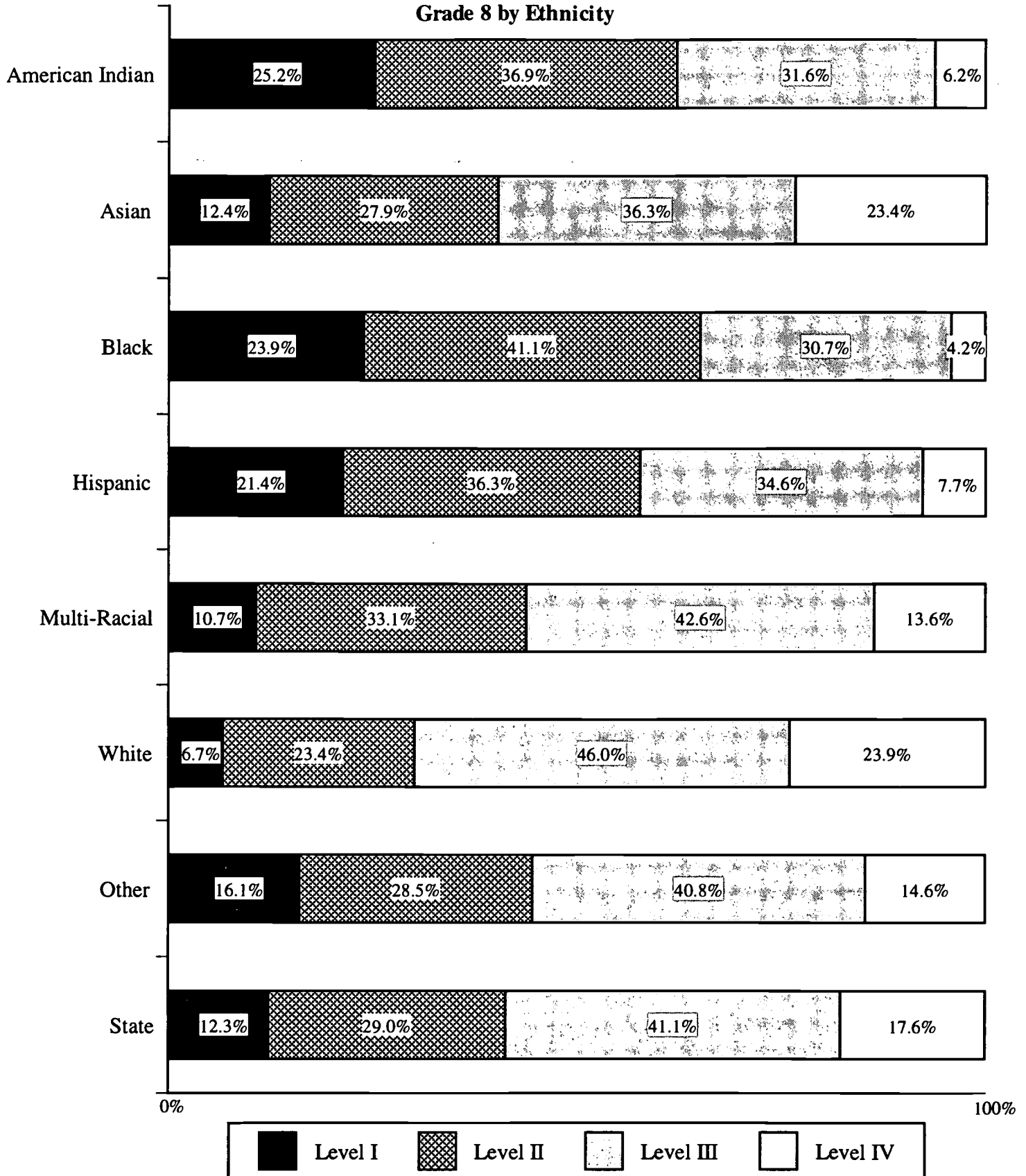
**Results by Ethnic Group**



**Results by Gender**



**Figure 7. 1997-98 North Carolina Open-Ended Assessment  
Percent of Students at Each Achievement Level  
Total Mean Scale Scores  
Grade 8 by Ethnicity**



Note: Achievement levels for each ethnicity category may not add to 100% due to rounding.

**Table 1. 1997-98 North Carolina Open-Ended Assessment  
Percent of Students at Each Achievement Level  
Total Mean Scale Scores  
Grade 8 by Ethnicity**

<b>All Students</b>	<b>N</b>	<b>%</b>
Achievement Level I	10,779	12.3
Achievement Level II	25,408	29.0
Achievement Level III	36,028	41.1
Achievement Level IV	15,448	17.6
<b>% Students at III or IV</b>	<b>51,476</b>	<b>58.7</b>
<b>American Indian</b>		
	<b>N</b>	<b>%</b>
Achievement Level I	360	25.2
Achievement Level II	527	36.9
Achievement Level III	451	31.6
Achievement Level IV	89	6.2
<b>% Students at III or IV</b>	<b>540</b>	<b>37.8</b>
<b>Asian</b>		
	<b>N</b>	<b>%</b>
Achievement Level I	160	12.4
Achievement Level II	361	27.9
Achievement Level III	470	36.3
Achievement Level IV	302	23.4
<b>% Students at III or IV</b>	<b>772</b>	<b>59.7</b>
<b>Black</b>		
	<b>N</b>	<b>%</b>
Achievement Level I	5,787	23.9
Achievement Level II	9,947	41.1
Achievement Level III	7,431	30.7
Achievement Level IV	1,021	4.2
<b>% Students at III or IV</b>	<b>8,452</b>	<b>34.9</b>

<b>Hispanic</b>	<b>N</b>	<b>%</b>
Achievement Level I	377	21.4
Achievement Level II	639	36.3
Achievement Level III	608	34.6
Achievement Level IV	135	7.7
<b>% Students at III or IV</b>	<b>743</b>	<b>42.2</b>
<b>Multi-Racial</b>		
	<b>N</b>	<b>%</b>
Achievement Level I	141	10.7
Achievement Level II	436	33.1
Achievement Level III	562	42.6
Achievement Level IV	179	13.6
<b>% Students at III or IV</b>	<b>741</b>	<b>56.2</b>
<b>White</b>		
	<b>N</b>	<b>%</b>
Achievement Level I	3,854	6.7
Achievement Level II	13,344	23.4
Achievement Level III	26,280	46.0
Achievement Level IV	13,648	23.9
<b>% Students at III or IV</b>	<b>39,928</b>	<b>69.9</b>
<b>Other</b>		
	<b>N</b>	<b>%</b>
Achievement Level I	65	16.1
Achievement Level II	115	28.5
Achievement Level III	165	40.8
Achievement Level IV	59	14.6
<b>% Students at III or IV</b>	<b>224</b>	<b>55.4</b>

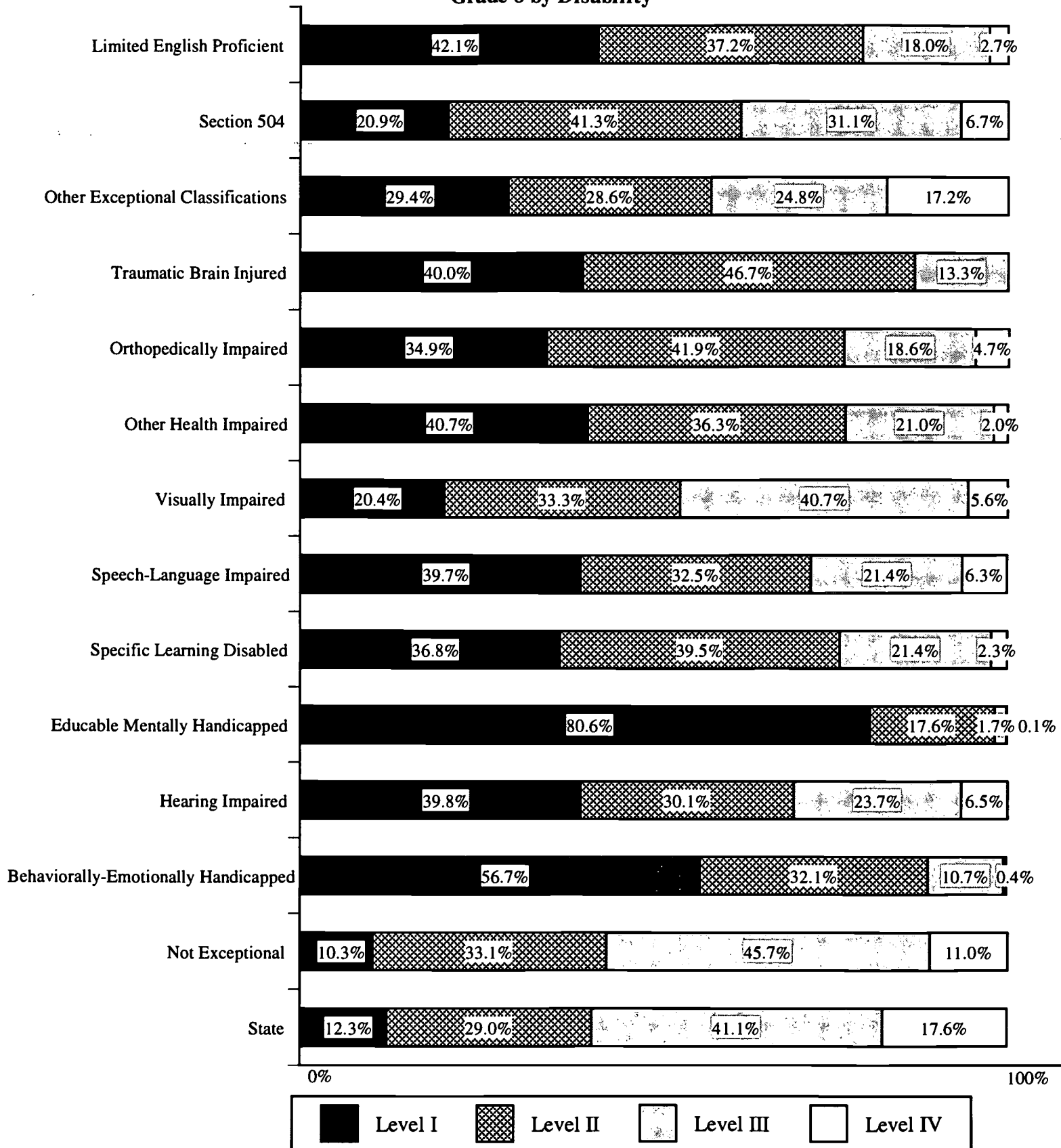
	<b>N</b>	<b>%</b>
All Students	87,663	100.0
American Indian	1,427	1.6
Asian	1,293	1.5
Black	24,186	27.6
Hispanic	1,759	2.0
Multi-Racial	1,318	1.5
White	57,126	65.2
Other	404	0.5

Notes: Due to rounding, some ethnicity categories may not sum to 100%.

All percents are calculated based on actual N-counts and are not summed.

When summed, the ethnic categories may not be equal to "All Students" because some students may not have coded in an ethnic category.

**Figure 8. 1997-98 North Carolina Open-Ended Assessment  
Percent of Students at Each Achievement Level  
Total Mean Scale Scores  
Grade 8 by Disability**



Note: Achievement levels for each ethnicity category may not add to 100% due to rounding.

**Table 2. 1997-98 North Carolina Open-Ended Assessment  
Percent of Students at Each Achievement Level  
Total Mean Scale Scores  
by Disability and Limited English Proficient  
Grade 8**

<b>Not Exceptional</b>	<b>N</b>	<b>%</b>
Achievement Level I	6,768	10.3
Achievement Level II	21,801	33.1
Achievement Level III	30,094	45.7
Achievement Level IV	7,224	11.0
<b>% Students at III or IV</b>	<b>37,318</b>	<b>56.6</b>

<b>Behaviorally-Emotionally Handicapped</b>	<b>N</b>	<b>%</b>
Achievement Level I	512	56.7
Achievement Level II	290	32.1
Achievement Level III	97	10.7
Achievement Level IV	4	0.4
<b>% Students at III or IV</b>	<b>101</b>	<b>11.2</b>

<b>Hearing Impaired</b>	<b>N</b>	<b>%</b>
Achievement Level I	37	39.8
Achievement Level II	28	30.1
Achievement Level III	22	23.7
Achievement Level IV	6	6.5
<b>% Students at III or IV</b>	<b>28</b>	<b>30.1</b>

<b>Educable Mentally Handicapped</b>	<b>N</b>	<b>%</b>
Achievement Level I	866	80.6
Achievement Level II	189	17.6
Achievement Level III	18	1.7
Achievement Level IV	1	0.1
<b>% Students at III or IV</b>	<b>19</b>	<b>1.8</b>

<b>Specific Learning Disabled</b>	<b>N</b>	<b>%</b>
Achievement Level I	2,045	36.8
Achievement Level II	2,195	39.5
Achievement Level III	1,189	21.4
Achievement Level IV	126	2.3
<b>% Students at III or IV</b>	<b>1,315</b>	<b>23.7</b>

<b>Speech-Language Disabled</b>	<b>N</b>	<b>%</b>
Achievement Level I	50	39.7
Achievement Level II	41	32.5
Achievement Level III	27	21.4
Achievement Level IV	8	6.3
<b>% Students at III or IV</b>	<b>35</b>	<b>27.8</b>

<b>Visually Impaired</b>	<b>N</b>	<b>%</b>
Achievement Level I	11	20.4
Achievement Level II	18	33.3
Achievement Level III	22	40.7
Achievement Level IV	3	5.6
<b>% Students at III or IV</b>	<b>25</b>	<b>46.3</b>

<b>Other Health Impaired</b>	<b>N</b>	<b>%</b>
Achievement Level I	264	40.7
Achievement Level II	235	36.3
Achievement Level III	136	21.0
Achievement Level IV	13	2.0
<b>% Students at III or IV</b>	<b>149</b>	<b>23.0</b>

<b>Orthopedically Impaired</b>	<b>N</b>	<b>%</b>
Achievement Level I	15	34.9
Achievement Level II	18	41.9
Achievement Level III	8	18.6
Achievement Level IV	2	4.7
<b>% Students at III or IV</b>	<b>10</b>	<b>23.3</b>

<b>Traumatic Brain Injured</b>	<b>N</b>	<b>%</b>
Achievement Level I	6	40.0
Achievement Level II	7	46.7
Achievement Level III	2	13.3
Achievement Level IV	0	0.0
<b>% Students at III or IV</b>	<b>2</b>	<b>13.3</b>

<b>Other Exceptional Classifications</b>	<b>N</b>	<b>%</b>
Achievement Level I	70	29.4
Achievement Level II	68	28.6
Achievement Level III	59	24.8
Achievement Level IV	41	17.2
<b>% Students at III or IV</b>	<b>100</b>	<b>42.0</b>

<b>Section 504</b>	<b>N</b>	<b>%</b>
Achievement Level I	147	20.9
Achievement Level II	290	41.3
Achievement Level III	218	31.1
Achievement Level IV	47	6.7
<b>% Students at III or IV</b>	<b>265</b>	<b>37.7</b>

<b>Limited English Proficient</b>	<b>N</b>	<b>%</b>
Achievement Level I	293	42.1
Achievement Level II	259	37.2
Achievement Level III	125	18.0
Achievement Level IV	19	2.7
<b>% Students at III or IV</b>	<b>144</b>	<b>20.7</b>

Notes: Due to rounding, some categories may not sum to 100%.  
All percents are calculated based on actual N-counts and are not summed.

**Table 3. 1997-98 North Carolina Open-Ended Assessment  
Average Performance of Students with Disabilities or Limited English Proficiency  
Grade 5**

Category	Number		Mean	Mean	Mean
	Tested	Percent <sup>1</sup>	Reading	Mathematics	Total <sup>2</sup>
All Students	91,295	100.0	46.4	53.3	49.8
Not Exceptional	66,826	74.0	46.0	51.6	48.8
Academically Gifted	13,071	14.5	54.8	67.1	61.0
Students with Disabilities	10,444	11.6			
Behaviorally-Emotionally Handicapped	792	0.9	36.6	45.1	40.8
Hearing Impaired	118	0.1	38.7	47.3	43.0
Educable Mentally Handicapped	718	0.8	31.1	40.3	35.7
Specific Learning Disabled	6,740	7.5	39.1	47.8	43.4
Speech-Language Impaired	804	0.9	41.4	48.2	44.8
Visually Impaired	33	0.0	37.9	47.1	42.5
Other Health Impaired	816	0.9	38.9	46.0	42.4
Orthopedically Impaired	44	0.0	40.8	46.0	43.4
Traumatic Brain Injured	22	0.0	*	*	*
Other Exceptional Classifications	357	0.4	41.9	52.6	47.3
Temporary Disability	29	0.0	*	*	*
Section 504	1139	1.2	41.8	47.7	44.8
Limited English Proficient	928	1.0	39.1	46.3	42.7

**Grade 8**

Category	Number		Mean	Mean	Mean
	Tested	Percent <sup>1</sup>	Reading	Mathematics	Total <sup>2</sup>
All Students	87,663	100.0	47.4	51.8	49.7
Not Exceptional	65,887	75.8	46.8	50.5	48.7
Academically Gifted	12,322	14.2	58.2	65.8	62.0
Students with Disabilities	8,749	10.1			
Behaviorally-Emotionally Handicapped	903	1.0	34.1	39.8	37.0
Hearing Impaired	93	0.1	38.9	45.0	42.1
Educable Mentally Handicapped	1,074	1.2	29.6	35.0	32.3
Specific Learning Disabled	5,555	6.4	38.6	43.4	41.1
Speech-Language Impaired	126	0.1	39.1	43.3	41.3
Visually Impaired	54	0.1	42.7		46.0
Other Health Impaired	648	0.7	38.5	42.6	40.6
Orthopedically Impaired	43	0.0	40.0	43.0	41.7
Traumatic Brain Injured	15	0.0	*	*	*
Other Exceptional Classifications	238	0.3	42.9	48.4	45.7
Temporary Disability	25	0.0	*	*	*
Section 504	702	0.8	43.0	46.7	44.9
Limited English Proficient	696	0.8	37.0	42.4	39.7

Notes: \*No scores are reported for groups with less than thirty students.

<sup>1</sup>Percent for "Not Exceptional" through "Other Exceptional Classifications" is based on the sum of the students in those categories. Percent for "Temporary Disability", "Limited English Proficient" and "Section 504" are based on the number tested in the "All Students" category.

<sup>2</sup>Mean Total" is the mean scale score in reading and mathematics combined.

The "All Students" and "Not Exceptional" categories are added for the purpose of comparison.

All data are rounded to the nearest tenth, therefore exceptional categories may not sum to 100%.



**Table 4. 1997-98 North Carolina Open-Ended Assessment  
Average Performance of Students Taking Modified Tests  
Grade 5**

Category	Number		Mean	Mean	Mean
	Tested	Percent <sup>1</sup>	Reading	Mathematics	Total <sup>2</sup>
All Students	91,295	100.0	46.4	53.3	49.8
Braille Edition	1	0.0	*	*	*
Large Print	39	0.2	41.2	49.3	45.3
Assistive Technology	8	0.0	*	*	*
Braille Writer	1	0.0	*	*	*
Cranmer Abacus	0	0.0	*	*	*
Dictation to Scribe	757	3.5	44.8	49.8	47.3
Interpreter Signs Test	19	0.1	*	*	*
Magnification Devices	5	0.0	*	*	*
Student Marks in Text Book	2,034	9.3	38.7	46.2	42.4
Test Administrator Reads Test Aloud	5,387	24.7	38.2	46.0	42.1
Use of Typewriter or Word Processor	36	0.2	45.8	54.2	49.9
Hospital/Home Testing	7	0.0	*	*	*
Multiple Test Sessions	675	3.1	38.2	46.9	42.5
Scheduled Extended Time	5,969	27.3	38.7	46.8	42.7
Testing in a Separate Room	6,803	31.2	38.3	46.4	42.3
English/Native Language Dictionary/Electronic Tran	53	0.2	39.5	46.1	42.9
Other	34	0.2	38.9	47.8	43.3

**Grade 8**

Category	Number		Mean	Mean	Mean
	Tested	Percent <sup>1</sup>	Reading	Mathematics	Total <sup>2</sup>
All Students	87,663	100.0	47.4	51.8	49.7
Braille Edition	8	0.1	*	*	*
Large Print	38	0.3	41.4	47.4	44.6
Assistive Technology	11	0.1	*	*	*
Braille Writer	3	0.0	*	*	*
Cranmer Abacus	2	0.0	*	*	*
Dictation to Scribe	169	1.2	42.3	47.9	45.2
Interpreter Signs Test	12	0.1	*	*	*
Magnification Devices	9	0.1	*	*	*
Student Marks in Text Book	738	5.4	35.9	40.9	38.4
Test Administrator Reads Test Aloud	3,221	23.4	35.3	40.3	37.9
Use of Typewriter or Word Processor	70	0.5	44.1	48.0	46.0
Hospital/Home Testing	10	0.1	*	*	*
Multiple Test Sessions	244	1.8	34.9	40.1	37.5
Scheduled Extended Time	4,609	33.5	36.7	41.5	39.1
Testing in a Separate Room	4,426	32.2	35.9	40.8	38.4
English/Native Language Dictionary/Electronic Tran	147	1.1	36.0	40.2	38.1
Other	45	0.3	37.7	41.0	39.4

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Notes: \*No scores are reported for groups with less than thirty students.

<sup>1</sup>Percents are based on the sum of the students in the modification categories.

<sup>2</sup>"Mean Total" is the mean scale score in reading and mathematics combined.

Modifications are available for students with disabilities, limited English proficiency, or temporary disabilities.

All data are rounded to the nearest tenth, therefore modification categories may not sum to 100%.

**Table 5. 1997-98 North Carolina Open-Ended Assessment  
Average Performance of Students Participating in a Title I Program**

**Grade 5**

Category	Number		Mean	Mean	Mean
	Tested	Percent <sup>1</sup>	Reading	Mathematics	Total <sup>2</sup>
All Students	91,295	100.0	46.4	53.3	49.8
Not in Title I Program	61,281	67.1	47.4	54.8	51.1
Schoolwide Program	28,449	31.2	44.5	50.4	47.4
Targeted Assistance Program	2,682	2.9	41.5	47.1	44.2
Migrant Program	193	0.2	39.5	45.6	42.6

**Grade 8**

Category	Number		Mean	Mean	Mean
	Tested	Percent <sup>1</sup>	Reading	Mathematics	Total <sup>2</sup>
All Students	87,663	100.0	47.4	51.8	49.7
Not in Title I Program	75,908	86.6	47.8	52.4	50.2
Schoolwide Program	10,950	12.5	44.7	48.1	46.5
Targeted Assistance Program	865	1.0	39.9	42.9	41.5
Migrant Program	135	0.2	37.0	43.0	40.1

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Note: <sup>1</sup>Percents are based on the number tested in the "All Students" category.

<sup>2</sup>"Mean Total" is the mean scale score in reading and mathematics combined.

# LEA and Charter School Performance by Region

1997-98

North Carolina

Open-Ended Assessment

Grades 5 and 8

Tables 6-11 provide the number of students tested, total mean scale scores, and the mean scale scores in reading and mathematics for each of the LEAs and charter schools by region. Charter schools are listed below the county in which they are located. Statistics are provided for grades 5 and 8.

**Table 6. 1997-98 North Carolina Open-Ended Assessment  
Mean Scale Scores  
Grade 5**

**Region by LEA and Charter School**

Western Region				Northwest Region			
	Number Tested	Reading		Number Tested	Mathematics		Total* Score
		Scale	Score		Scale	Score	
State	91,295	46.4	53.3	91,295	46.4	53.3	49.8
Western Region	7,099	47.7	55.2	14,158	47.3	54.2	50.7
Buncombe	1,968	48.5	56.7	409	45.9	52.3	49.1
Asheville City	330	45.7	54.3	91	47.3	55.1	51.2
Francine Delany†	23	43.7	58.1	221	45.1	52.9	49.0
Cherokee	244	46.7	54.5	173	54.0	56.0	55.1
The Learning Center†	7	46.9	59.9	4	*	*	*
Clay	82	46.0	53.2	1,057	49.1	54.9	52.0
Graham	98	47.5	54.0	904	46.6	54.4	50.5
Haywood	589	49.8	55.4	9	42.0	41.6	41.7
Henderson	822	48.1	55.5	1,129	46.5	55.1	50.8
Jackson	271	45.3	54.1	18	35.4	54.0	44.7
Summit Charter†	17	46.8	54.5	317	46.2	54.4	50.3
Macon	325	46.9	54.4	202	48.2	54.7	51.5
Madison	204	42.8	53.2	1,358	45.9	53.7	49.7
McDowell	455	47.7	53.5	239	42.2	50.7	46.4
Mitchell	170	47.9	54.0	159	46.9	50.4	48.6
Polk	159	52.0	57.3	373	47.8	54.0	50.9
Rutherford	734	47.5	53.4	3,135	47.5	54.5	50.9
Swain	114	48.7	56.3	25	38.2	44.9	41.5
Transylvania	296	49.0	56.7	1,175	45.2	52.2	48.7
Yancey	191	43.1	52.5	266	49.9	53.9	51.9
				547	48.3	54.3	51.3
				568	49.5	55.4	52.5
				78	49.7	57.1	53.4
				11	44.1	48.0	46.1
				135	48.3	54.0	51.2
				385	50.8	58.0	54.4
				740	48.9	54.5	51.7
				8	26.5	40.9	33.8
				422	47.3	54.5	50.9

\*"Total Scale Score" is the mean scale score in reading and mathematics combined. Data were deleted where numbers tested were five or less.

†Denotes a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.

**Table 7. 1997-98 North Carolina Open-Ended Assessment  
Mean Scale Scores  
Grade 5**

**Region by LEA and Charter School**

Southwest Region				Northeast Region				
	Number Tested	Reading Scale Score	Mathematics Scale Score	Total* Scale Score	Number Tested	Reading Scale Score	Mathematics Scale Score	Total* Scale Score
State	91,295	46.4	53.3	49.8	91,295	46.4	53.3	49.8
Southwest Region	19,529	46.1	52.6	49.4	6,332	45.2	50.8	48.0
Anson	298	44.8	48.2	46.5	510	45.9	52.1	49.0
Cabarrus	1,246	49.6	55.5	52.5	298	46.0	47.5	46.7
Kannapolis City	311	46.0	50.9	48.5	88	49.8	52.8	51.3
Cleveland	714	46.6	53.0	49.8	190	45.4	52.5	48.9
Kings Mountain City	329	46.6	51.8	49.2	222	47.6	52.4	50.0
Shelby City	234	45.7	51.7	48.7	358	46.9	56.2	51.5
Gaston	2,160	42.9	51.7	47.3	570	42.4	48.2	45.3
Hoke	427	42.8	48.9	45.8	138	44.3	48.9	46.6
Lincoln	797	46.7	53.8	50.2	403	47.2	50.3	48.8
Mecklenburg	7,171	46.0	52.9	49.4	234	46.2	51.6	48.9
Community Charter†	6	40.3	47.2	43.7	69	46.0	47.4	46.7
Montgomery	300	43.6	50.0	46.7	297	43.2	48.2	45.7
Moore	813	45.2	52.7	48.9	55	49.0	49.8	49.4
Mast School†	37	47.2	57.1	52.1	366	43.0	50.1	46.5
Richmond	564	43.7	49.5	46.6	256	45.9	50.0	48.0
Rowan	1,482	45.9	51.8	48.8	489	46.6	51.8	49.2
Scotland	465	46.8	49.8	48.2	147	40.5	50.7	45.6
Stanly	728	48.0	52.9	50.4	1,396	45.1	51.5	48.3
Union	1,447	50.1	55.5	52.8	75	46.5	49.0	47.7
Washington					171	41.8	47.2	44.5

30

31

\*"Total Scale Score" is the mean scale score in reading and mathematics combined. Data were deleted where numbers tested were five or less.

†Denotes a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.

**Table 8. 1997-98 North Carolina Open-Ended Assessment  
Mean Scale Scores  
Grade 5**

**Region by LEA and Charter School**

	Southeast Region			Central Region				
	Number Tested	Reading Scale Score	Mathematics Scale Score	Total * Scale Score	Number Tested	Reading Scale Score	Mathematics Scale Score	Total * Scale Score
State	91,295	46.4	53.3	49.8	91,295	46.4	53.3	49.8
Southeast Region	16,781	45.3	52.0	48.6	27,396	46.7	54.1	50.4
Bladen	391	43.8	51.3	47.5	1,511	45.4	54.5	49.9
Brunswick	695	45.3	51.2	48.2	262	44.5	51.5	47.9
Carteret	636	46.4	52.6	49.4	513	47.0	53.9	50.4
Columbus	528	44.2	50.1	47.1	11	36.0	49.5	42.8
Whiteville City	221	45.6	52.3	48.9	2,098	45.8	52.3	49.0
Craven	1,114	46.0	54.2	50.1	560	42.7	49.6	46.1
Cumberland	3,892	45.9	51.8	48.8	537	47.7	50.7	49.2
Duplin	608	44.5	52.4	48.4	4,517	46.2	53.5	49.9
Greene	181	44.9	48.3	46.6	1,162	45.5	51.6	48.5
Jones	111	48.5	53.5	51.0	1,361	48.6	54.1	51.4
Lenoir	729	46.8	51.2	49.0	666	44.7	52.3	48.5
New Hanover	1,570	47.9	55.9	51.9	1,262	45.5	51.5	48.5
Onslow	1,580	46.1	53.9	50.0	82	39.2	48.8	43.9
Pamlico	119	44.5	52.1	48.3	495	45.9	53.8	49.8
Arapahoe Charter†	30	45.4	54.9	50.1	16	49.3	60.6	55.1
Pender	431	47.4	51.3	49.3	632	52.0	61.7	56.8
Robeson	1,818	40.0	48.3	44.1	19	44.0	52.7	48.4
Sampson	526	46.2	50.8	48.5	450	44.5	50.5	47.5
Clinton City	172	47.9	53.5	50.8	1,206	48.1	54.6	51.4
Wayne	1,418	44.9	50.8	47.9	335	49.3	56.1	52.7
Bright Horizons Charter†	11	39.4	45.3	42.2	1,101	46.9	52.5	49.7
					540	43.2	48.4	45.8
					6,899	48.0	57.4	52.7
					1	*	*	*
					61	60.8	70.1	65.5
					9	46.2	62.8	54.2
					225	42.7	49.2	45.9
					844	45.1	50.0	47.6
					21	37.2	43.7	40.4

\* "Total Scale Score" is the mean scale score in reading and mathematics combined. Data were deleted where numbers tested were five or less.

† Denotes a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.

**Table 9. 1997-98 North Carolina Open-Ended Assessment  
Mean Scale Scores  
Grade 8**

**Region by LEA and Charter School**

Western Region				Northwest Region					
	Number Tested	Reading Scale Score	Mathematics Scale Score	Total* Scale Score	Number Tested	Reading Scale Score	Mathematics Scale Score	Total* Scale Score	
State	87,663	47.4	51.8	49.7	87,663	47.4	51.8	49.7	
Western Region	7,017	49.8	55.1	52.5	13,633	48.5	53.0	50.8	
Buncombe	1,791	52.0	58.0	55.0	Alexander	426	48.0	53.2	50.7
Asheville City	279	51.8	54.1	53.0	Alleghany	107	46.7	55.2	51.0
Cherokee	294	47.9	53.0	50.5	Ashie	264	48.6	53.2	50.9
The Learning Center†	3	*	*	*	Avery	191	48.2	52.3	50.3
Clay	111	47.1	55.8	51.5	Grandfather Academy†	7	39.7	46.1	43.0
Graham	93	53.3	54.1	53.8	Burke	978	50.1	54.2	52.2
Haywood	611	49.1	54.4	51.8	Caldwell	882	46.9	52.1	49.5
Henderson	860	50.2	56.0	53.1	Nguzo Saba Charter†	5	*	*	*
Jackson	274	51.7	57.7	54.7	Catawba	1,042	48.7	52.3	50.5
Summit Charter†	8	47.8	51.9	49.9	Engelmann†	24	46.3	52.4	49.4
Macon	324	49.0	53.6	51.4	Hickory City	278	47.1	53.8	50.5
Madison	178	46.2	49.9	48.1	Newton-Conover City	164	45.5	52.7	49.2
McDowell	461	49.4	54.7	52.1	Davidson	1,445	47.1	52.0	49.6
Mitchell	188	48.4	54.0	51.3	Lexington City	195	45.2	48.6	47.0
Polk	186	49.2	55.8	52.5	Thomasville City	150	44.4	48.8	46.7
Rutherford	714	45.3	50.1	47.8	Davie	416	49.0	53.9	51.4
Swain	144	49.9	52.0	51.0	Forsyth	2,711	48.9	52.8	50.9
Transylvania	322	48.9	56.3	52.6	L.I.F.T. Charter†	39	37.0	40.3	38.7
Yancey	176	52.7	55.5	54.2	Quality Education Academy†	22	44.5	41.7	43.2
					C.G. Woodson†	13	46.3	44.0	45.2
					Iredell-Statesville	1,100	46.5	52.0	49.3
					Mooresville City	291	50.7	55.7	53.2
					Stokes	556	48.8	53.3	51.2
					Surry	579	48.4	52.9	50.8
					Elkin City	67	53.2	59.0	56.2
					Bridges Charter†	4	*	*	*
					Mount Airy City	103	47.3	54.0	50.7
					Watauga	416	53.7	59.1	56.4
					Wilkes	755	50.9	53.7	52.3
					Yadkin	403	51.3	54.1	52.7

34

\*"Total Scale Score" is the mean scale score in reading and mathematics combined. Data were deleted where numbers tested were five or less.

†Denotes a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.

**Table 10. 1997-98 North Carolina Open-Ended Assessment  
Mean Scale Scores  
Grade 8**

**Region by LEA and Charter School**

	Southwest Region			Northeast Region				
	Number Tested	Reading Scale Score	Mathematics Scale Score	Total* Scale Score	Number Tested	Reading Scale Score	Mathematics Scale Score	Total* Scale Score
State	87,663	47.4	51.8	49.7	87,663	47.4	51.8	49.7
Southwest Region	18,807	46.7	51.0	48.9	6,394	45.3	48.8	47.1
Anson	316	41.6	45.1	43.4	521	48.3	51.0	49.7
Cabarrus	1,277	51.6	56.2	54.0	257	44.0	45.7	44.9
Kannapolis City	291	45.7	51.5	48.6	99	48.3	48.4	48.4
Cleveland	613	46.7	51.2	49.0	205	47.7	51.4	49.6
Kings Mountain City	280	46.8	51.2	49.1	230	47.1	52.3	49.7
Shelby City	205	49.2	49.1	49.2	361	51.5	54.7	53.1
Gaston	2,189	45.4	49.3	47.4	527	44.7	48.5	46.7
Hoke	425	46.7	48.2	47.6	137	44.2	48.5	46.4
Lincoln	818	46.9	51.7	49.4	457	39.8	42.1	41.0
Mecklenburg	6,626	46.4	50.7	48.6	234	48.5	53.7	51.1
Montgomery	332	44.8	50.9	47.9	90	33.4	38.5	36.0
Moore	822	47.6	51.2	49.4	305	42.0	44.3	43.2
Richmond	551	43.5	46.2	45.0	65	43.1	46.9	45.1
Rowan	1,496	45.7	50.7	48.3	368	42.6	49.2	46.0
Scotland	525	46.8	48.9	47.9	271	42.6	47.4	45.1
Stanly	700	47.6	53.2	50.5	449	45.1	49.6	47.4
Union	1,341	48.0	53.6	50.9	175	47.9	49.6	48.8
Pitt					1,390	46.4	49.8	48.2
Right Step Academy					16	31.7	39.3	35.7
Tyrrell					52	46.5	49.7	48.1
Washington					185	44.2	46.1	45.2

30

37

\*\*Total Scale Score\* is the mean scale score in reading and mathematics combined. Data were deleted where numbers tested were five or less.

†Denotes a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.



**Table 11. 1997-98 North Carolina Open-Ended Assessment  
Mean Scale Scores  
Grade 8**

**Region by LEA and Charter School**

	Number Tested	Reading Scale Score		Mathematics Scale Score		Total* Scale Score
		Scale	Score	Scale	Score	
<b>State</b>	<b>87,663</b>	<b>47.4</b>	<b>47.4</b>	<b>51.8</b>	<b>51.8</b>	<b>49.7</b>
<b>Southeast Region</b>	<b>16,481</b>	<b>46.1</b>	<b>46.1</b>	<b>50.1</b>	<b>50.1</b>	<b>48.2</b>
Bladen	382	46.4	46.4	50.1	50.1	48.4
Brunswick	699	45.9	45.9	51.5	51.5	48.7
Carteret	736	47.3	47.3	52.0	52.0	49.7
Columbus	588	43.7	43.7	46.9	46.9	45.4
Whiteville City	195	45.4	45.4	49.3	49.3	47.4
Craven	1,067	46.7	46.7	51.7	51.7	49.3
Cumberland	3,596	45.8	45.8	48.9	48.9	47.4
Duplin	681	48.8	48.8	50.5	50.5	49.7
Greene	198	45.2	45.2	45.2	45.2	45.3
Jones	92	43.8	43.8	45.6	45.6	44.8
Lenoir	713	48.1	48.1	51.0	51.0	49.6
New Hanover	1,577	49.3	49.3	54.5	54.5	51.9
Onslow	1,622	45.5	45.5	50.7	50.7	48.2
Pamlico	121	44.1	44.1	53.4	53.4	48.8
Arapahoe Charter†	27	46.0	46.0	57.3	57.3	51.7
Pender	446	47.6	47.6	52.6	52.6	50.1
Robeson	1,679	42.8	42.8	46.5	46.5	44.8
Communities in Schools†	27	30.3	30.3	35.7	35.7	33.0
Sampson	466	45.5	45.5	50.7	50.7	48.2
Clinton City	183	47.6	47.6	51.6	51.6	49.6
Wayne	1,386	45.9	45.9	49.8	49.8	47.9

38

\*"Total Scale Score" is the mean scale score in reading and mathematics combined. Data were deleted where numbers tested were five or less.

†Denotes a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.

	Number Tested	Reading Scale Score		Mathematics Scale Score		Total* Scale Score
		Scale	Score	Scale	Score	
<b>State</b>	<b>87,663</b>	<b>47.4</b>	<b>47.4</b>	<b>51.8</b>	<b>51.8</b>	<b>49.7</b>
<b>Central Region</b>	<b>25,331</b>	<b>48.0</b>	<b>48.0</b>	<b>52.7</b>	<b>52.7</b>	<b>50.4</b>
Alamance	1,445	47.8	47.8	51.5	51.5	49.7
Lakeside School†	7	35.1	35.1	35.9	35.9	35.6
Caswell	270	47.6	47.6	49.1	49.1	48.4
Chatham	431	49.2	49.2	52.7	52.7	51.0
Chatham Charter†	6	44.5	44.5	51.0	51.0	47.8
Durham	1,889	47.5	47.5	50.6	50.6	49.1
Franklin	458	45.0	45.0	49.5	49.5	47.4
Granville	508	47.9	47.9	51.1	51.1	49.6
Guilford	4,147	47.7	47.7	52.0	52.0	49.9
Harnett	1,089	46.1	46.1	50.6	50.6	48.4
Johnston	1,286	49.2	49.2	54.7	54.7	52.0
Lee	676	49.0	49.0	52.8	52.8	50.9
Nash/Rocky Mount	1,246	45.7	45.7	50.5	50.5	48.1
Orange	408	46.3	46.3	51.0	51.0	48.7
Orange Charter†	17	45.5	45.5	49.1	49.1	47.4
Chapel Hill City	638	55.9	55.9	59.5	59.5	57.7
School in the Community†	6	48.0	48.0	54.8	54.8	51.5
Person	404	46.4	46.4	52.2	52.2	49.4
Randolph	1,195	48.9	48.9	51.2	51.2	50.1
Asheboro City	287	47.3	47.3	53.0	53.0	50.2
Rockingham	1,012	48.2	48.2	51.2	51.2	49.8
Vance	460	43.0	43.0	47.4	47.4	45.3
Wake	6,317	49.2	49.2	56.1	56.1	52.7
Bonner Academy†	1	*	*	*	*	*
Magellan Charter†	24	49.2	49.2	56.5	56.5	52.9
Warren	228	41.4	41.4	44.5	44.5	43.0
Wilson	876	46.1	46.1	49.8	49.8	48.0

39

# Mean LEA and Charter School Performance

1997-98

North Carolina

Open-Ended Assessment

Grades 5 and 8

Tables 12 and 13 provide stem and leaf plots that depict the total mean scale score performance for each of the LEAs and individual charter schools rounded up to the nearest two-tenths of a point. Statistics are provided for grades 5 and 8.

**Table 12. 1997-98 North Carolina Open-Ended Assessment  
Grade 5 Total Mean Scale Scores\*  
By LEA and Charter School**

State		1997-98 LEA Performance
	65.6	Magellan Charter <sup>†</sup>
	...	
	56.8	Chapel Hill
	...	
	55.2	Avery, Orange Charter <sup>†</sup>
	...	
	54.8	Polk
	...	
	54.4	Watauga
	54.2	Sterling Montessori <sup>†</sup>
	...	
	53.4	Elkin
	...	
	53.0	The Learning-Center <sup>†</sup> , Transylvania
	52.8	Asheboro, Union, Wake
	52.6	Buncombe, Cabarrus, Haywood, Surry
	52.4	Swain
	52.2	Mast <sup>†</sup>
	52.0	Burke, Mooresville, New Hanover
	51.8	Henderson, Wilkes
	51.6	Dare, Newton-Conover
	51.4	Camden, Johnston, Randolph, Stokes
	51.2	Alleghany, Mount Airy
	51.0	Davie, Forsyth, Jones, Mitchell, Yadkin
	50.8	Catawba, Clinton, Francine Delany <sup>†</sup> , Graham
	50.6	Caldwell, Cherokee, Macon, McDowell, Summit Charter <sup>†</sup>
	50.4	Chatham, Hickory, Rutherford, Stanly
	50.2	Arapahoe Charter <sup>†</sup> , Craven, Lincoln
1997-98 State	50.0	Alamance, Asheville, Currituck, Guilford, Onslow
	49.8	Cleveland, Davidson, Jackson, Orange, Rockingham
	49.6	Clay
	49.4	Carteret, Hyde, Mecklenburg, Pender
	49.2	Alexander, Granville, Kings Mountain, Pasquotank
	49.0	Ashe, Beaufort, Chowan, Durham, Lenoir, Moore, Roanoke Rapids, Whiteville
	48.8	Cumberland, Halifax, Iredell-Statesville, Rowan, Shelby
	48.6	Harnett, Kannapolis, Lee, Nash/Rocky Mount, Sampson, Thomasville
	48.4	Duplin, Pamlico, Pitt, Village Charter <sup>†</sup>
	48.2	Brunswick, Scotland
	48.0	Caswell, Madison, Northampton, Wayne
1996-97 State	47.8	Tyrrell, Yancey
	47.6	Bladen, Person, Wilson
	47.4	Gaston
	47.2	Columbus
	...	
	46.8	Bertie, Montgomery, Weldon
	46.6	Anson, Gates, Greene, Martin, Richmond
	46.4	Lexington
	46.2	Bridges Charter <sup>†</sup> , Franklin
	46.0	Warren
	45.8	Hertford, Hoke, Vance
	45.6	Perquimans
	45.4	Edgecombe
	...	
	44.8	Engelmann <sup>†</sup>
	44.6	Washington
	...	
	44.2	Robeson
	44.0	Charter Public School <sup>†</sup>
	43.8	Community Charter <sup>†</sup>
	...	
	42.8	Chatham Charter <sup>†</sup>
	...	
	42.2	Bright Horizons Charter <sup>†</sup>
	...	
	41.8	Nguzo Saba Charter <sup>†</sup>
	41.6	C.G. Woodson <sup>†</sup>
	...	
	41.0	Bonner Academy <sup>†</sup>
	...	
	40.4	S.B. Howard Charter <sup>†</sup>
	...	
	35.8	Grandfather Academy <sup>†</sup>
	...	
	33.8	United Children Ability Nook <sup>†</sup>

\*Scale scores are rounded up to the nearest two-tenths of a point.

<sup>†</sup>Indicates a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.

**Table 13. 1997-98 North Carolina Open-Ended Assessment  
Grade 8 Total Mean Scale Scores\*  
By LEA and Charter School**

State	1997-98 LEA Performance
	57.8 ... Chapel Hill
	56.4 ... Watauga
	56.2 ... Elkin
	55.0 ... Buncombe
	54.8 ... Jackson
	54.2 ... Yancey
	54.0 ... Cabarrus
	53.8 ... Graham
	53.2 ... Dare, Henderson, Mooresville
	53.0 ... Asheville, Magellan Charter <sup>†</sup>
	52.8 ... Wake, Yadkin
	52.6 ... Polk, Transylvania
	52.4 ... The Learning Center <sup>†</sup> , Wilkes
	52.2 ... Burke, McDowell
	52.0 ... Johnston, New Hanover
	51.8 ... Arapahoe Charter <sup>†</sup> , Haywood
	51.6 ... Clay, School in the Community <sup>†</sup>
	51.4 ... Davie, Macon, Mitchell, Nguzo Saba Charter <sup>†</sup>
	51.2 ... Roanoke Rapids, Stokes
	51.0 ... Alleghany, Ashe, Chatham, Forsyth, Lee, Swain, Union
	50.8 ... Alexander, Mount Airy, Surry
	50.6 ... Catawba, Cherokee, Hickory, Stanly
	50.4 ... Avery
	50.2 ... Asheboro, Pender, Randolph
	50.0 ... Guilford, Summit Charter <sup>†</sup>
1997-98 State	49.8 ... Alamance, Beaufort, Carteret, Currituck, Duplin, Rockingham
	49.6 ... Caldwell, Chowan, Clinton, Davidson, Granville, Lenoir
	49.4 ... Craven, Engelmann <sup>†</sup> , Iredell-Statesville, Lincoln, Moore, Person
	49.2 ... Durham, Kings Mountain, Newton-Conover, Shelby
1996-97 State	49.0 ... Cleveland
	48.8 ... Brunswick, Orange, Pamlico, Perquimans
	48.6 ... Kannapolis, Mecklenburg
	48.4 ... Bladen, Camden, Caswell, Harnett, Rowan
	48.2 ... Madison, Nash/Rocky Mount, Onslow, Pitt, Sampson, Tyrrell
	48.0 ... Montgomery, Scotland, Wayne, Wilson
	47.8 ... Chatham Charter <sup>†</sup> , Rutherford
	47.6 ... Bridges Charter <sup>†</sup> , Hoke
	47.4 ... Cumberland, Franklin, Gaston, Orange Charter <sup>†</sup> , Pasquotank, Whiteville
	47.0 ... Lexington
	46.8 ... Edgecombe, Thomasville
	46.4 ... Gates
	46.0 ... Martin
	45.4 ... Columbus, Greene, Vance
	45.2 ... C.G. Woodson <sup>†</sup> , Hyde, Northampton, Washington
	45.0 ... Bertie, Richmond
	44.8 ... Jones, Robeson
	43.4 ... Anson
	43.2 ... Hertford, Quality Education Academy <sup>†</sup>
	43.0 ... Grandfather Academy <sup>†</sup> , Warren
	42.0 ... Bonner Academy <sup>†</sup>
	41.0 ... Halifax
	38.8 ... L.I.F.T Charter <sup>†</sup>
	36.0 ... Weldon
	35.8 ... Right Step Academy <sup>†</sup>
	35.6 ... Lakeside School <sup>†</sup>
	33.0 ... Communities in Schools Academy <sup>†</sup>

\*Scale scores are rounded up to the nearest two-tenths of a point.

<sup>†</sup>Denotes a charter school. For reporting purposes the charter school name has been abbreviated. The complete charter school name can be found in the appendix.

# State-Level Summary Statistics And Frequency Distributions

1997-98

North Carolina

Open-Ended Assessment

Grades 5 and 8

Tables 14-19 provide state-level summary statistics including frequency distributions. The number tested at each grade level, the number of students achieving each of the possible scale scores, and the standard deviations. Summary statistics are provided for reading, mathematics, and the total score for grades 5 and 8.

**Table 14. 1997-98 North Carolina Open-Ended Assessment  
Grade 5 Reading Frequency Report**

NUMBER OF STUDENTS	91,295	HIGH SCORE	90
		LOW SCORE	9
MEAN	46.4		
		LOCAL PERCENTILES	SCALE SCORE
STANDARD DEVIATION	10.6	90	61.58
		75	53.19
		50 (MEDIAN)	47.53
VARIANCE	113.0	25	39.06
		10	33.89

SCALE SCORE	FREQUENCY DISTRIBUTION			
	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
90	1	91295	0.00	100.00
89	0	91294	0.00	100.00
88	0	91294	0.00	100.00
87	0	91294	0.00	100.00
86	12	91294	0.01	100.00
85	0	91282	0.00	99.99
84	0	91282	0.00	99.99
83	42	91282	0.05	99.99
82	0	91240	0.00	99.94
81	0	91240	0.00	99.94
80	3	91240	0.00	99.94
79	132	91237	0.14	99.94
78	0	91105	0.00	99.79
77	13	91105	0.01	99.79
76	0	91092	0.00	99.78
75	382	91092	0.42	99.78
74	0	90710	0.00	99.36
73	0	90710	0.00	99.36
72	45	90710	0.05	99.36
71	0	90665	0.00	99.31
70	1066	90665	1.17	99.31
69	0	89599	0.00	98.14
68	86	89599	0.09	98.14
67	0	89513	0.00	98.05
66	2282	89513	2.50	98.05
65	0	87231	0.00	95.55
64	126	87231	0.14	95.55
63	0	87105	0.00	95.41
62	5380	87105	5.89	95.41
61	237	81725	0.26	89.52
60	0	81488	0.00	89.26
59	0	81488	0.00	89.26
58	0	81488	0.00	89.26
57	9035	81488	9.90	89.26
56	0	72453	0.00	79.36
55	0	72453	0.00	79.36
54	0	72453	0.00	79.36
53	12670	72453	13.88	79.36
52	0	59783	0.00	65.48
51	0	59783	0.00	65.48
50	0	59783	0.00	65.48
49	0	59783	0.00	65.48
48	14518	59783	15.90	65.48
47	0	45265	0.00	49.58
46	0	45265	0.00	49.58
45	0	45265	0.00	49.58
44	14701	45265	16.10	49.58
43	571	30564	0.63	33.48
42	0	29993	0.00	32.85
41	0	29993	0.00	32.85
40	0	29993	0.00	32.85

**Table 14. 1997-98 North Carolina Open-Ended Assessment  
Grade 5 Reading Frequency Report (continued)**

SCALE SCORE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
39	16306	29993	17.86	32.85
38	0	13687	0.00	14.99
37	0	13687	0.00	14.99
36	0	13687	0.00	14.99
35	0	13687	0.00	14.99
34	7532	13687	8.25	14.99
33	227	6155	0.25	6.74
32	0	5928	0.00	6.49
31	0	5928	0.00	6.49
30	0	5928	0.00	6.49
29	3086	5928	3.38	6.49
28	132	2842	0.14	3.11
27	0	2710	0.00	2.97
26	0	2710	0.00	2.97
25	0	2710	0.00	2.97
24	1237	2710	1.35	2.97
23	66	1473	0.07	1.61
22	0	1407	0.00	1.54
21	0	1407	0.00	1.54
20	0	1407	0.00	1.54
19	630	1407	0.69	1.54
18	0	777	0.00	0.85
17	0	777	0.00	0.85
16	0	777	0.00	0.85
15	24	777	0.03	0.85
14	399	753	0.44	0.82
13	0	354	0.00	0.39
12	0	354	0.00	0.39
11	0	354	0.00	0.39
10	0	354	0.00	0.39
9	354	354	0.39	0.39

**Table 15. 1997-98 North Carolina Open-Ended Assessment  
Grade 5 Mathematics Frequency Report**

NUMBER OF STUDENTS	91,295	HIGH SCORE	93
		LOW SCORE	36
MEAN	53.3	LOCAL PERCENTILES	SCALE SCORE
STANDARD DEVIATION	11.5	90	68.34
		75	60.37
		50 (MEDIAN)	52.05
VARIANCE	131.6	25	46.69
		10	37.97

**FREQUENCY DISTRIBUTION**

SCALE SCORE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
93	36	91295	0.04	100.00
92	0	91259	0.00	99.96
91	81	91259	0.09	99.96
90	0	91178	0.00	99.87
89	0	91178	0.00	99.87
88	0	91178	0.00	99.87
87	222	91178	0.24	99.87
86	0	90956	0.00	99.63
85	0	90956	0.00	99.63
84	383	90956	0.42	99.63
83	0	90573	0.00	99.21
82	0	90573	0.00	99.21
81	653	90573	0.72	99.21
80	0	89920	0.00	98.49
79	1083	89920	1.19	98.49
78	0	88837	0.00	97.31
77	17	88837	0.02	97.31
76	1395	88820	1.53	97.29
75	0	87425	0.00	95.76
74	2010	87425	2.20	95.76
73	0	85415	0.00	93.56
72	0	85415	0.00	93.56
71	2649	85415	2.90	93.56
70	0	82766	0.00	90.66
69	85	82766	0.09	90.66
68	3253	82681	3.56	90.56
67	106	79428	0.12	87.00
66	4086	79322	4.48	86.89
65	151	75236	0.17	82.41
64	0	75085	0.00	82.24
63	5508	75085	6.03	82.24
62	163	69577	0.18	76.21
61	0	69414	0.00	76.03
60	7185	69414	7.87	76.03
59	0	62229	0.00	68.16
58	222	62229	0.24	68.16
57	0	62007	0.00	67.92
56	9909	62007	10.85	67.92
55	0	52098	0.00	57.07
54	0	52098	0.00	57.07
53	268	52098	0.29	57.07
52	13733	51830	15.04	56.77
51	297	38097	0.33	41.73
50	0	37800	0.00	41.40
49	0	37800	0.00	41.40
48	282	37800	0.31	41.40
47	18115	37518	19.84	41.10
46	0	19403	0.00	21.25
45	282	19403	0.31	21.25
44	0	19121	0.00	20.94
43	0	19121	0.00	20.94
42	321	19121	0.35	20.94
41	0	18800	0.00	20.59
40	0	18800	0.00	20.59
39	0	18800	0.00	20.59
38	18401	18800	20.16	20.59
37	0	399	0.00	0.44
36	399	399	0.44	0.44



**Table 16. 1997-98 North Carolina Open-Ended Assessment  
Grade 5 Total Frequency Report**

NUMBER OF STUDENTS	91,295	HIGH SCORE	91
MEAN	49.8	LOW SCORE	24
STANDARD DEVIATION	9.5	LOCAL PERCENTILES	SCALE SCORE
VARIANCE	90.4	90	62.43
		75	56.18
		50 (MEDIAN)	49.66
		25	43.06
		10	37.83

FREQUENCY DISTRIBUTION

SCALE SCORE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
91	0	91295	0.00	100.00
90	0	91295	0.00	100.00
89	0	91295	0.00	100.00
88	1	91295	0.00	100.00
87	2	91294	0.00	100.00
86	0	91292	0.00	100.00
85	4	91292	0.00	100.00
84	3	91288	0.00	99.99
83	5	91285	0.01	99.99
82	13	91280	0.01	99.98
81	35	91267	0.04	99.97
80	11	91232	0.01	99.93
79	48	91221	0.05	99.92
78	49	91173	0.05	99.87
77	107	91124	0.12	99.81
76	81	91017	0.09	99.70
75	192	90936	0.21	99.61
74	127	90744	0.14	99.40
73	201	90617	0.22	99.26
72	437	90416	0.48	99.04
71	305	89979	0.33	98.56
70	425	89674	0.47	98.22
69	728	89249	0.80	97.76
68	612	88521	0.67	96.96
67	699	87909	0.77	96.29
66	1190	87210	1.30	95.53
65	902	86020	0.99	94.22
64	1409	85118	1.54	93.23
63	1421	83709	1.56	91.69
62	1855	82288	2.03	90.13
61	1983	80433	2.17	88.10
60	1476	78450	1.62	85.93
59	2966	76974	3.25	84.31
58	1635	74008	1.79	81.06
57	2942	72373	3.22	79.27
56	3008	69431	3.29	76.05
55	3835	66423	4.20	72.76
54	2272	62588	2.49	68.56
53	3091	60316	3.39	66.07
52	4866	57225	5.33	62.68
51	940	52359	1.03	57.35
50	6900	51419	7.56	56.32
49	1089	44519	1.19	48.76
48	6542	43430	7.17	47.57
47	2096	36888	2.30	40.41
46	1575	34792	1.73	38.11
45	6857	33217	7.51	36.38
44	157	26360	0.17	28.87
43	7697	26203	8.43	28.70
42	135	18506	0.15	20.27
41	3411	18371	3.74	20.12
40	2218	14960	2.43	16.39
39	106	12742	0.12	13.96
38	5232	12636	5.73	13.84
37	92	7404	0.10	8.11
36	3064	7312	3.36	8.01
35	312	4248	0.34	4.65
34	1688	3936	1.85	4.31
33	154	2248	0.17	2.46
32	61	2094	0.07	2.29
31	801	2033	0.88	2.23
30	57	1232	0.06	1.35
29	453	1175	0.50	1.29
28	45	722	0.05	0.79
27	34	677	0.04	0.74
26	325	643	0.36	0.70
25	18	318	0.02	0.35
24	300	300	0.33	0.33

**Table 17. 1997-98 North Carolina Open-Ended Assessment  
Grade 8 Reading Frequency Report**

NUMBER OF STUDENTS	87,663	HIGH SCORE	89
		LOW SCORE	12
MEAN	47.4	LOCAL PERCENTILES	SCALE SCORE
STANDARD DEVIATION	11.1	90	62.79
		75	54.14
		50 (MEDIAN)	45.37
VARIANCE	122.8	25	40.85
		10	35.54

**FREQUENCY DISTRIBUTION**

SCALE SCORE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
89	10	87663	0.01	100.00
88	0	87653	0.00	99.99
87	0	87653	0.00	99.99
86	47	87653	0.05	99.99
85	0	87606	0.00	99.93
84	0	87606	0.00	99.93
83	0	87606	0.00	99.93
82	122	87606	0.14	99.93
81	0	87484	0.00	99.80
80	0	87484	0.00	99.80
79	2	87484	0.00	99.80
78	286	87482	0.33	99.79
77	0	87196	0.00	99.47
76	0	87196	0.00	99.47
75	12	87196	0.01	99.47
74	646	87184	0.74	99.45
73	0	86538	0.00	98.72
72	25	86538	0.03	98.72
71	0	86513	0.00	98.69
70	1375	86513	1.57	98.69
69	59	85138	0.07	97.12
68	0	85079	0.00	97.05
67	0	85079	0.00	97.05
66	2742	85079	3.13	97.05
65	0	82337	0.00	93.92
64	0	82337	0.00	93.92
63	4868	82337	5.55	93.92
62	0	77469	0.00	88.37
61	0	77469	0.00	88.37
60	208	77469	0.24	88.37
59	7539	77261	8.60	88.13
58	0	69722	0.00	79.53
57	285	69722	0.33	79.53
56	0	69437	0.00	79.21
55	0	69437	0.00	79.21
54	10347	69437	11.80	79.21
53	0	59090	0.00	67.41
52	0	59090	0.00	67.41
51	344	59090	0.39	67.41
50	12627	58746	14.40	67.01
49	0	46119	0.00	52.61
48	366	46119	0.42	52.61
47	0	45753	0.00	52.19
46	0	45753	0.00	52.19
45	14982	45753	17.09	52.19
44	406	30771	0.46	35.10
43	0	30365	0.00	34.64
42	0	30365	0.00	34.64
41	13051	30365	14.89	34.64
40	402	17314	0.46	19.75
39	0	16912	0.00	19.29
38	0	16912	0.00	19.29

**Table 17. 1997-98 North Carolina Open-Ended Assessment  
Grade 8 Reading Frequency Report (continued)**

SCALE SCORE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
37	0	16912	0.00	19.29
36	8455	16912	9.64	19.29
35	271	8457	0.31	9.65
34	0	8186	0.00	9.34
33	0	8186	0.00	9.34
32	0	8186	0.00	9.34
31	4228	8186	4.82	9.34
30	119	3958	0.14	4.52
29	0	3839	0.00	4.38
28	0	3839	0.00	4.38
27	0	3839	0.00	4.38
26	2074	3839	2.37	4.38
25	58	1765	0.07	2.01
24	0	1707	0.00	1.95
23	0	1707	0.00	1.95
22	0	1707	0.00	1.95
21	1121	1707	1.28	1.95
20	0	586	0.00	0.67
19	0	586	0.00	0.67
18	0	586	0.00	0.67
17	0	586	0.00	0.67
16	571	586	0.65	0.67
15	0	15	0.00	0.02
14	0	15	0.00	0.02
13	0	15	0.00	0.02
12	15	15	0.02	0.02

**Table 18. 1997-98 North Carolina Open-Ended Assessment  
Grade 8 Mathematics Frequency Report**

NUMBER OF STUDENTS	87,663	HIGH SCORE	84
		LOW SCORE	31
MEAN	51.8	LOCAL PERCENTILES	SCALE SCORE
STANDARD DEVIATION	11.7	90	68.01
		75	59.37
		50 (MEDIAN)	52.54
VARIANCE	137.3	25	42.25
		10	36.80

SCALE SCORE	FREQUENCY DISTRIBUTION			
	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
84	277	87663	0.32	100.00
83	0	87386	0.00	99.68
82	0	87386	0.00	99.68
81	0	87386	0.00	99.68
80	0	87386	0.00	99.68
79	789	87386	0.90	99.68
78	34	86597	0.04	98.78
77	0	86563	0.00	98.75
76	1319	86563	1.50	98.75
75	0	85244	0.00	97.24
74	53	85244	0.06	97.24
73	1876	85191	2.14	97.18
72	74	83315	0.08	95.04
71	0	83241	0.00	94.96
70	2586	83241	2.95	94.96
69	117	80655	0.13	92.01
68	3374	80538	3.85	91.87
67	130	77164	0.15	88.02
66	0	77034	0.00	87.88
65	4326	77034	4.93	87.88
64	152	72708	0.17	82.94
63	0	72556	0.00	82.77
62	5789	72556	6.60	82.77
61	0	66767	0.00	76.16
60	161	66767	0.18	76.16
59	6788	66606	7.74	75.98
58	0	59818	0.00	68.24
57	190	59818	0.22	68.24
56	7483	59628	8.54	68.02
55	197	52145	0.22	59.48
54	0	51948	0.00	59.26
53	8485	51948	9.68	59.26
52	0	43463	0.00	49.58
51	0	43463	0.00	49.58
50	9153	43463	10.44	49.58
49	0	34310	0.00	39.14
48	0	34310	0.00	39.14
47	309	34310	0.35	39.14
46	9393	34001	10.71	38.79
45	0	24608	0.00	28.07
44	328	24608	0.37	28.07
43	0	24280	0.00	27.70
42	9583	24280	10.93	27.70
41	0	14697	0.00	16.77
40	0	14697	0.00	16.77
39	0	14697	0.00	16.77
38	0	14697	0.00	16.77
37	8465	14697	9.66	16.77
36	0	6232	0.00	7.11
35	461	6232	0.53	7.11
34	0	5771	0.00	6.58
33	0	5771	0.00	6.58
32	0	5771	0.00	6.58
31	5771	5771	6.58	6.58

**Table 19. 1997-98 North Carolina Open-Ended Assessment  
Grade 8 Total Frequency Report**

NUMBER OF STUDENTS	87,663	HIGH SCORE	87
		LOW SCORE	23
MEAN	49.7	LOCAL PERCENTILES	SCALE SCORE
STANDARD DEVIATION	10.2	90	63.12
		75	56.76
		50 (MEDIAN)	49.55
VARIANCE	104.8	25	42.80
		10	36.74

FREQUENCY DISTRIBUTION				
SCALE SCORE	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
87	0	87663	0.00	100.00
86	0	87663	0.00	100.00
85	4	87663	0.00	100.00
84	0	87659	0.00	100.00
83	9	87659	0.01	100.00
82	0	87650	0.00	99.99
81	45	87650	0.05	99.99
80	1	87605	0.00	99.93
79	60	87604	0.07	99.93
78	36	87544	0.04	99.86
77	100	87508	0.11	99.82
76	66	87408	0.08	99.71
75	252	87342	0.29	99.63
74	30	87090	0.03	99.35
73	419	87060	0.48	99.31
72	121	86641	0.14	98.83
71	664	86520	0.76	98.70
70	421	85856	0.48	97.94
69	641	85435	0.73	97.46
68	690	84794	0.79	96.73
67	1253	84104	1.43	95.94
66	908	82851	1.04	94.51
65	1289	81943	1.47	93.48
64	1310	80654	1.49	92.00
63	1191	79344	1.36	90.51
62	2128	78153	2.43	89.15
61	1589	76025	1.81	86.72
60	2221	74436	2.53	84.91
59	2160	72215	2.46	82.38
58	1881	70055	2.15	79.91
57	3292	68174	3.76	77.77
56	2480	64882	2.83	74.01
55	3226	62402	3.68	71.18
54	3201	59176	3.65	67.50
53	2349	55975	2.68	63.85
52	2571	53626	2.93	61.17
51	3934	51055	4.49	58.24
50	3453	47121	3.94	53.75
49	2050	43668	2.34	49.81
48	5431	41618	6.20	47.47
47	1698	36187	1.94	41.28
46	4278	34489	4.88	39.34
45	1909	30211	2.18	34.46
44	5552	28302	6.33	32.29
43	1190	22750	1.36	25.95
42	2502	21560	2.85	24.59
41	2780	19058	3.17	21.74
40	575	16278	0.66	18.57
39	4157	15703	4.74	17.91
38	767	11546	0.87	13.17
37	2653	10779	3.03	12.30
36	1139	8126	1.30	9.27
35	121	6987	0.14	7.97
34	1567	6866	1.79	7.83
33	1232	5299	1.41	6.04
32	751	4067	0.86	4.64
31	1035	3316	1.18	3.78
30	30	2281	0.03	2.60
29	318	2251	0.36	2.57
28	824	1933	0.94	2.21
27	100	1109	0.11	1.27
26	585	1009	0.67	1.15
25	0	424	0.00	0.48
24	13	424	0.01	0.48
23	411	411	0.47	0.47

# State-Level Score-Point Distributions

1997-98

North Carolina

Open-Ended Assessment

Grades 5 and 8

Table 20 provides the state-level score point distributions by item for each of the items on the tests. Statistics are provided for reading and mathematics for grades 5 and 8.

Table 20. 1997-98 North Carolina Open-Ended Assessment  
Score-Point Distribution by Item

Grade 5					Grade 8				
Reading					Reading				
Item 1 (0-3)	0 3%	1 47%	2 48%	3 2%	Item 1 (0-3)	0 31%	1 60%	2 8%	3 1%
Item 2 (0-3)	0 3%	1 48%	2 46%	3 3%	Item 2 (0-2)	0 34%	1 57%	2 9%	
Item 3 (0-3)	0 3%	1 59%	2 35%	3 3%	Item 3 (0-3)	0 5%	1 64%	2 27%	3 3%
Item 4 (0-3)	0 4%	1 75%	2 20%	3 1%	Item 4 (0-3)	0 6%	1 56%	2 36%	3 2%
Item 5 (0-3)	0 8%	1 66%	2 25%	3 1%	Item 5 (0-3)	0 11%	1 56%	2 31%	3 2%
Item 6 (0-3)	0 19%	1 74%	2 6%	3 1%	Item 6 (0-3)	0 8%	1 72%	2 19%	3 1%
Mathematics					Mathematics				
Item 1 (0-3)	0 51%	1 28%	2 11%	3 9%	Item 1 (0-3)	0 33%	1 24%	2 11%	3 33%
Item 2 (0-2)	0 92%	1 4%	2 5%		Item 2 (0-3)	0 36%	1 42%	2 12%	3 9%
Item 3 (0-3)	0 40%	1 37%	2 8%	3 14%	Item 3 (0-2)	0 24%	1 62%	2 14%	
Item 4 (0-3)	0 70%	1 27%	2 2%	3 1%	Item 4 (0-2)	0 32%	1 36%	2 33%	
Item 5 (0-3)	0 86%	1 4%	2 4%	3 6%	Item 5 (0-3)	0 83%	1 8%	2 4%	3 6%
Item 6 (0-2)	0 64%	1 27%	2 9%		Item 6 (0-2)	0 68%	1 19%	2 12%	

Note: Due to rounding, some items may not sum to 100%

# Goals and Thinking Skills Measured

1997-98

North Carolina

Open-Ended Assessment

Grades 5 and 8

These tables provides the reading and mathematics goals described in the North Carolina *Standard Course of Study* measured by each of the items on the tests. In addition, the thinking skills measured by each of the items are provided. Goals and thinking skills measured by the items are provided for reading and mathematics for grades 5 and 8.



**1997-98 North Carolina Open-Ended Assessment  
Goal from the North Carolina *Standard Course of Study*  
Measured by Each Test Item**

**Grade 5 – Form D**

Item	Goal
1	<i>Communication Skills Goal 2.</i> Use language for the acquisition, interpretation, and application of information. (Evaluating)
2	<i>Communication Skills Goal 2.</i> Use language for the acquisition, interpretation, and application of information. (Evaluating)
3	<i>Communication Skills Goal 4.</i> Use language for aesthetic and personal response. (Evaluating)
4	<i>Communication Skills Goal 4.</i> Use language for aesthetic and personal response. (Evaluating)
5	<i>Communication Skills Goal 3.</i> Use language for critical analysis and evaluation. (Evaluating)
6	<i>Communication Skills Goal 3.</i> Use language for critical analysis and evaluation. (Evaluating)
7	<i>Mathematics Goal 7.</i> Compute with rational numbers. (Analyzing)
8	<i>Mathematics Goal 4.</i> Understand and use standard units of metric and customary measure. (Applying)
9	<i>Mathematics Goal 3.</i> Demonstrate an understanding of patterns and relationships. (Applying)
10	<i>Mathematics Goal 4.</i> Understand and use standard units of metric and customary measure. (Applying)
11	<i>Mathematics Goal 3.</i> Demonstrate an understanding of patterns and relationships. (Analyzing)
12	<i>Mathematics Goal 5.</i> Solve problems and reason mathematically. (Analyzing)

**1997-98 North Carolina Open-Ended Assessment**  
**Goal from the North Carolina Standard Course of Study**  
**Measured by Each Test Item**

**Grade 8 – Form D**

Item	Goal
1	<i>Communication Skills Goal 2.</i> Use language for the acquisition, interpretation, and application of information. (Analyzing)
2	<i>Communication Skills Goal 2.</i> Use language for the acquisition, interpretation, and application of information. (Evaluating)
3	<i>Communication Skills Goal 2.</i> Use language for the acquisition, interpretation, and application of information. (Generating)
4	<i>Communication Skills Goal 3.</i> Use language for critical analysis and evaluation. (Evaluating)
5	<i>Communication Skills Goal 3.</i> Use language for critical analysis and evaluation. (Evaluating)
6	<i>Communication Skills Goal 4.</i> Use language for aesthetic and personal response. (Generating)
7	<i>Mathematics Goal 6.</i> Demonstrate an understanding and use of graphing, probability, and statistics. (Applying)
8	<i>Mathematics Goal 1.</i> Demonstrate an understanding and use of real numbers. (Evaluating)
9	<i>Mathematics Goal 6.</i> Demonstrate an understanding and use of graphing, probability, and statistics. (Evaluating)
10	<i>Mathematics Goal 7.</i> Compute real numbers. (Evaluating)
11	<i>Mathematics Goal 4.</i> Demonstrate an understanding and use of measurement. (Analyzing)
12	<i>Mathematics Goal 6.</i> Demonstrate an understanding and use of graphing, probability, and statistics. (Evaluating)

# Copies of the Grades 5 and 8 Open-Ended Tests

1997-98

North Carolina

Open-Ended Assessment

Grades 5 and 8

The following pages provide copies of the Open-Ended Assessment instruments administered to students in grades 5 and 8 during the 1997-98 school year. State-level score-point distributions have been provided for each item on the test for each grade-level.





*You are going to read a story about a dragon who is not mean. Think about how this story is different from other dragon stories and answer the questions that follow.*

## The Lonely Dragon

The average dragon's idea of a good time is to kidnap a princess, burn down a village, and scare the wits out of everyone. But Charles was a sweet, good-natured fellow who wanted nothing to do with those kinds of things, so he had no dragon friends. Unfortunately, he looked exactly like all the other mean and nasty dragons, and no human ever stayed around long enough to find out how nice he really was. So he was often lonely.

One day Charles decided that he'd had enough of being lonely and was going to do something about it. He headed off across the countryside in search of a friend.

The first person he met was a woodcutter in the forest. Charles managed to sneak up on him, so the man didn't have time to run away.

"Will you be my friend?" he asked rather timidly.

The man realized from the tone of Charles' voice that he was not the usual fearsome sort of dragon. So he considered for a minute. Then he said, "Friends are supposed to do things for each other. If I'm your friend, what will you do for me?"

Charles thought a moment, then he turned and knocked over five trees with a single blow of his tail.

"Perfect!" shouted the woodcutter, and he took Charles home to supper.

As Charles entered the woodcutter's yard, he turned to ask a question and knocked over the fence with his tail. He became flustered and turned around quickly to apologize and knocked a hole in the front wall of the man's house.

"This will never do," the woodcutter said. "You are much too big to be my friend!" And he sent Charles back where he had come from.

Charles was very depressed, but he kept traveling, and soon he saw an old woman plowing her field. Luckily, the old woman was nearsighted and didn't realize Charles was a dragon until he was right beside her.

"Will you be my friend?" he asked, even more timidly.

The old farmer peered in the direction of his voice. "Friends are supposed to do things for each other," she said. "If I'm your friend, what will you do for me?"

Charles thought for a moment and said, "I could go home ahead of you and start a fire and warm your supper. I'm very good with fires."

"Perfect," said the woman. "I'm always too tired in the evening to fix myself a hot meal. A fire-starter is just what I need."

That evening Charles went to the old woman's house, started the fire with one breath, and began warming her supper. The old woman's house was even smaller than the woodcutter's, but somehow Charles managed to control his tail and not knock anything over. His new friend seemed pleased with the supper he prepared, and she even gave him a kiss on the cheek before she went to bed.

Charles finally found a big enough space under one of the windows and lay down. He was so happy that he let out a long sigh of contentment. Unfortunately, his sigh set the curtains on fire.

"This will never do," the old woman cried as she jumped up to douse the curtains with water. "You are much too hot to be my friend!" She sent Charles out the door and back where he had come from.

Now Charles was even more depressed. He walked slowly back through the woods. He hadn't gone very far, though, when he came upon a little man sitting in a

clearing. The man was huddled in the morning sun with a blanket around his shoulders and a crown on his head. He didn't look any happier than Charles.

Charles thought the man would run away. But he didn't. So Charles sat down and sighed. So did the man. Charles sighed again. So did the man.

"I've had a rotten day," Charles finally said.

"Me, too," the man replied.

"Why was your day so rotten?" Charles asked politely.

"You first," the man said.

"Well, it isn't just this day especially," Charles said. "My whole life is rotten."

The man nodded, and Charles began telling him how lonely he was and how he had gone in search of a friend. He told him about the woodcutter and how his tail got in the way. He told him about the farmer and how his breath had ruined everything.

"Why didn't you run away when you saw me coming?" he asked.

"I thought you were the answer to my problems," the man said. "I figured if you ate me, at least I wouldn't be lonely any more."

"You are lonely, too?" Charles asked.

The man nodded and pointed to his crown. "See this?" he asked. "Do you know what this means? It means I'm a king. Wonderful. I collect taxes and rent from my subjects, have a party once a year, and that's the only time I ever have any fun.

"No one ever comes to my door and says, 'Oh, I was just passing by and thought I would pop in for tea.' Nobody asks me over for dinner, or wants me to come have a peek at their new baby. Nobody thinks a king would want to do any of those ordinary things. But I'm really just an ordinary guy.



"To make matters worse I live alone in a drafty 300-room castle. I can never keep a fire going, so I'm always cold. Lonely and cold—that's the story of my life."

The king sniffed and wrapped the blanket tighter around himself, and then looked at Charles.

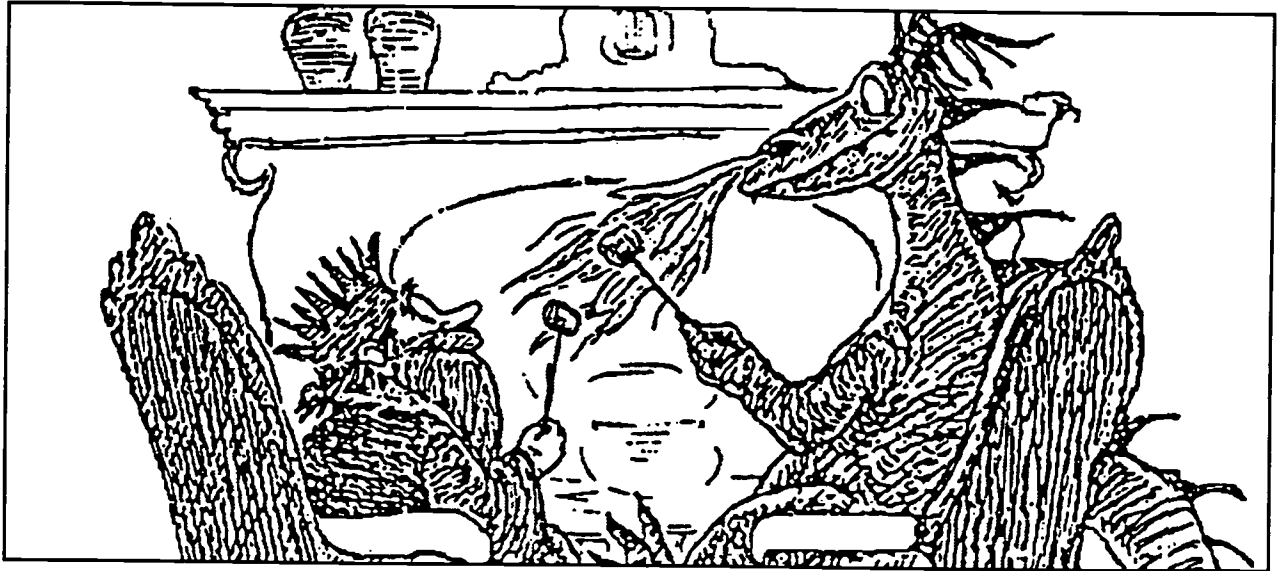
Charles felt his heart leap, but he hardly dared to agree. "They say that friends are supposed to do things for each

other," he said. "If I'm your friend, what can you do for me?"

"Why, I'll be your friend," the king replied.

"Perfect!" said Charles.

The king took Charles back to his dragon-sized castle, and Charles got a fire going in the fireplace. They kept each other company and roasted marshmallows and lived happily ever after.



"The Lonely Dragon" by Nancy Antle. Copyright 1985 by Nancy Antle. Illustrations copyright 1985 Lynn Musinger. Text reprinted by permission of the author. Illustrations reprinted by permission of *Cricket Magazine*, September 1985, Volume 13, Number 1, copyright 1985 by Open Court Publishing Company.

1. Why was Charles the dragon lonely? Explain your answer using specific examples from the passage.

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<u>0</u> 3%	<u>1</u> 47%	<u>2</u> 48%	<u>3</u> 2%
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2. Why do you think the friendship between Charles and the king was more lasting than Charles's friendships with the woman and the woodcutter? Explain your answer using specific examples from the passage.

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<u>0</u> 3%	<u>1</u> 48%	<u>2</u> 46%	<u>3</u> 3%
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DO NOT WRITE IN THIS SHADED AREA

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3. If you had been a character in the passage, would you have been Charles's friend?  
Explain your answer using specific examples from the passage.

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<u>0</u> 3%	<u>1</u> 59%	<u>2</u> 35%	<u>3</u> 3%
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4. Directions: Write a paragraph on the topic below.

**Charles was a very special dragon.**

**Describe the kind of dragon Charles was so that your reader will be able to picture him. Include specific examples from the passage in your description.**

**As you write your paragraph, remember to:**

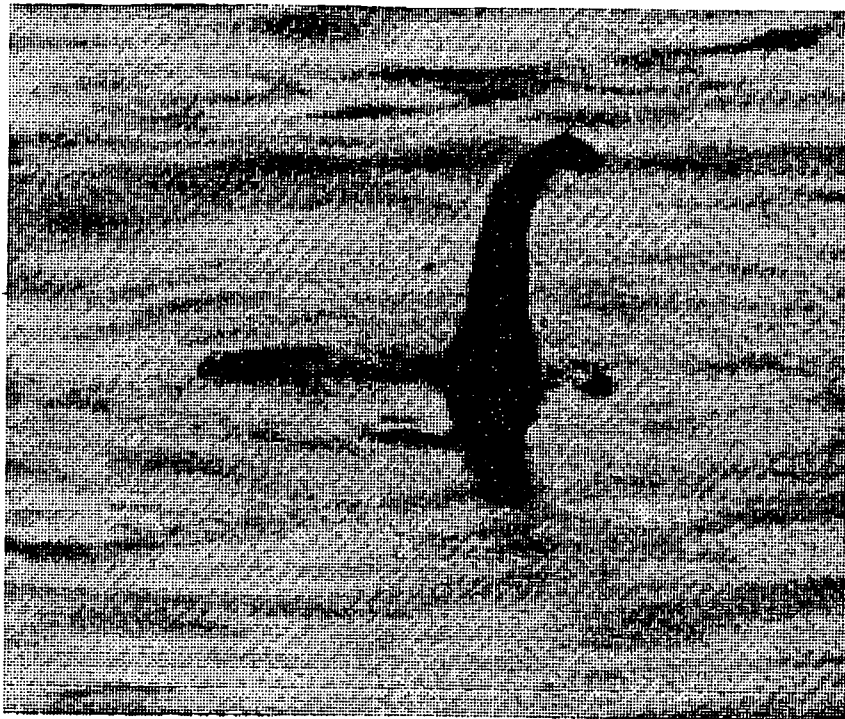
- Use words that will help your reader picture Charles the dragon.
- Write in complete sentences.
- Use correct grammar, spelling, punctuation, and capitalization.

$\frac{0}{4\%}$     
   $\frac{1}{75\%}$     
   $\frac{2}{20\%}$     
   $\frac{3}{1\%}$



DO NOT WRITE IN THIS SHADED AREA

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## Is The Loch Ness Monster Just a Lot of Hot Air?

*Scientists are very interested in finding answers to the mystery of the Loch Ness monster. Read to learn about one scientist's ideas and answer the questions that follow.*

Loch Ness, Scotland: For years cryptozoologists (people who study "unexpected" animals) have been studying this famous lake. And for years people have been taking pictures of something they see there . . . something unknown . . . something they say is a monster whose nickname is "Nessie."

Recently a well-known British scientist has shed some new light on Loch Ness. Dr. Maurice Burton, once a firm believer in Nessie, has changed his mind. Now he feels that many of the photographs show nothing more than large, playful otters.

Dr. Burton also thinks that people may be seeing something else in the lake. He points out that water-soaked branches and logs often settle on the bottom. As they begin to rot, gas bubbles form in them. When the bubbles are big enough to float the mess to the surface, up pops "Nessie." The gas bubbles burst, and the "monster" sinks. But not before it has been spotted and photographed.

Dr. Burton's idea is very interesting. But somehow it's not as much fun as thinking that a real monster may live in Loch Ness.

5. How do you know that the Loch Ness monster might be real but Charles the lonely dragon is not real? Explain your answer using specific examples from the passages.

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<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>
8%	66%	25%	1%

6. Authors use different kinds of artwork with different kinds of writing.

Why are the pictures shown the best to use with each passage? Explain your answer using specific examples from the pictures and the passages.

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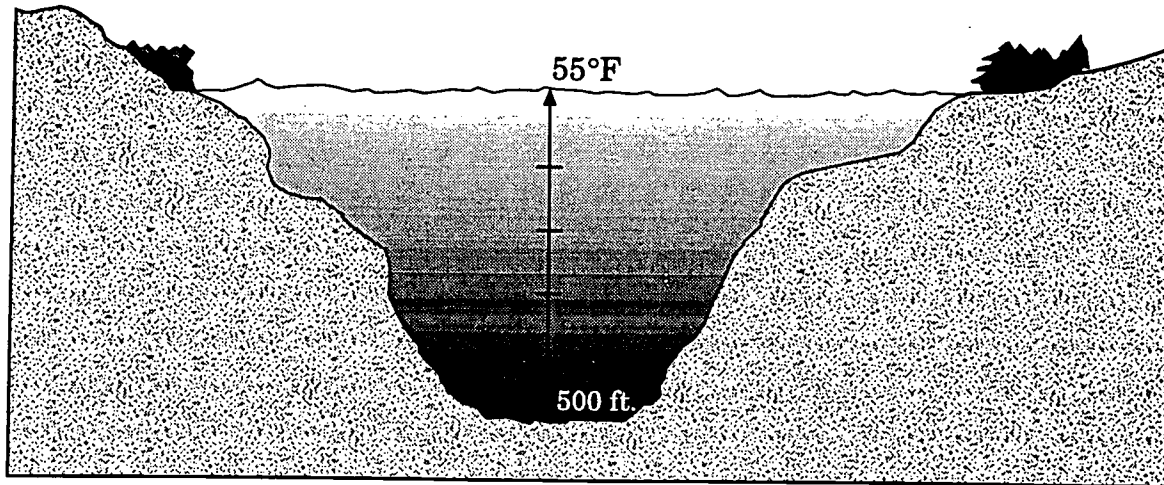


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<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>
19%	74%	6%	1%

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DO NOT WRITE IN THIS SHADED AREA



7. The drawing above shows a very deep lake much like Loch Ness. The water temperature at the surface of the lake is 55°F.

If the water temperature drops 2°F every 50 feet, what is the temperature at the bottom of the lake?

\_\_\_\_\_ °F

Explain or show how you determined your answer.

$\frac{0}{51}\%$        $\frac{1}{28}\%$        $\frac{2}{11}\%$        $\frac{3}{9}\%$

8. The fireplace room in the king's castle has a perimeter of 240 feet. What are three possible pairs of lengths and widths of this room?

1. \_\_\_\_\_ ft × \_\_\_\_\_ ft

2. \_\_\_\_\_ ft × \_\_\_\_\_ ft

3. \_\_\_\_\_ ft × \_\_\_\_\_ ft

$\frac{0}{92}\%$        $\frac{1}{4}\%$        $\frac{2}{5}\%$

9. The king has a clock in his castle that rings once at one o'clock, twice at two o'clock, and so on during the day.

How many rings will the king's clock make in a day?

\_\_\_\_\_ rings

Explain or show how you determined your answer.

$\frac{0}{40\%}$       $\frac{1}{37\%}$       $\frac{2}{8\%}$       $\frac{3}{14\%}$



10. A scientist was camped on the southern shore of Loch Ness. She walked 300 yards south from her camp. She then walked 112 yards west, 212 yards north, 62 yards east, and 88 yards north.

How far was the scientist from her camp when she stopped? \_\_\_\_\_ yards

Use the picture below to explain or show how you determined your answer.

Loch Ness

scientist's camp

$\frac{0}{70\%}$      $\frac{1}{27\%}$      $\frac{2}{2\%}$      $\frac{3}{1\%}$



11. When Charles met the king, Charles weighed 1600 pounds. If his weight had doubled every year, how much did Charles weigh 4 years before he met the king?

\_\_\_\_\_ pounds

Explain or show how you determined your answer.

$\frac{0}{86\%}$        $\frac{1}{4\%}$        $\frac{2}{4\%}$        $\frac{3}{6\%}$

12. When you add together the ages of Charles and his two younger sisters, Charlotte and Charlene, you get 55. Together, the ages of Charles and Charlotte equal 44.

How old is each dragon if Charles is 14 years older than Charlotte?

Charles \_\_\_\_\_ years old

Charlotte \_\_\_\_\_ years old

Charlene \_\_\_\_\_ years old

$\frac{0}{64\%}$        $\frac{1}{27\%}$        $\frac{2}{9\%}$





Read the opening paragraphs below of *Homesick, My Own Story*, the autobiography of Jean Fritz. Here, ten-year-old Jean tells about her life in China. Answer the questions that follow.

In my father's study there was a large globe with all the countries of the world running around it. I could put my finger on the exact spot where I was and had been ever since I'd been born. And I was on the wrong side of the globe. I was in China in a city named Hankow, a dot on a crooked line that seemed to break the country right in two. The line was really the Yangtse River, but who would know by looking at a map what the Yangtse River really was?

Orange-brown, muddy mustard-colored. And wide, wide, wide. With a river smell that was old and came all the way up from the bottom. Sometimes old women knelt on the riverbank, begging the River God to return a son or grandson who may have drowned. They would wail and beat the earth to make the River God pay attention, but I knew how busy the River God must be. All those people on the Yangtse River! Coolies hauling water. Women washing clothes. Houseboats swarming with old people and young, chickens and pigs. Big crooked-sailed junks with eyes painted on their prows so they could see where they were going. I loved the Yangtse River, but, of course, I belonged on the other side of the world. In America with my grandmother.

*Twenty-five fluffy little yellow chicks hatched from our eggs today, my grandmother wrote.*

*I wrote my grandmother that I had watched a Chinese magician swallow three yards of fire.*

The trouble with living on the wrong side of the world was that I didn't feel like a *real* American.

For instance. I could never be president of the United States. I didn't want to be

president; I wanted to be a writer. Still, why should there be a *law* saying that only a person born in the United States could be president? It was as if I wouldn't be American enough.

Actually, I was American every minute of the day, especially during school hours. I went to a British school and every morning we sang "God Save the King." Of course the British children loved singing about their gracious king. Ian Forbes stuck out his chest and sang as if he were saving the king all by himself. Everyone sang. Even Gina Boss who was Italian. And Vera Sebastian who was so Russian she dressed the way Russian girls did long ago before the Revolution when her family had to run away to keep from being killed.

But I wasn't Vera Sebastian. I asked my mother to write an excuse so I wouldn't have to sing, but she wouldn't do it. "When in Rome," she said, "do as the Romans do." What she meant was, "Don't make trouble. Just sing." So for a long time I did. I sang with my fingers crossed but still I felt like a traitor.

Then one day I thought: If my mother and father were really and truly in Rome, they wouldn't do what the Romans did at all. They'd probably try to get the Romans to do what *they* did, just as they were trying to teach the Chinese to do what Americans did. (My mother even gave classes in American manners.)

So that day I quit singing. I kept my mouth locked tight against the king of England. Our teacher, Miss Williams, didn't notice at first.

Excerpt from *Homesick, My Own Story* by Jean Fritz, text copyright 1982 by Jean Fritz. Reprinted by permission of G.P. Putnam's Sons.

1. During what time period do you think the events in this passage took place? Explain what evidence from the passage was the most helpful to you in determining the time period you chose.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

$\frac{0}{31\%}$        $\frac{1}{60\%}$        $\frac{2}{8\%}$        $\frac{3}{1\%}$

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Explain why the lines from the grandmother's letter and Jean's letter are important enough to Jean and the plot of the story to be in italics.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

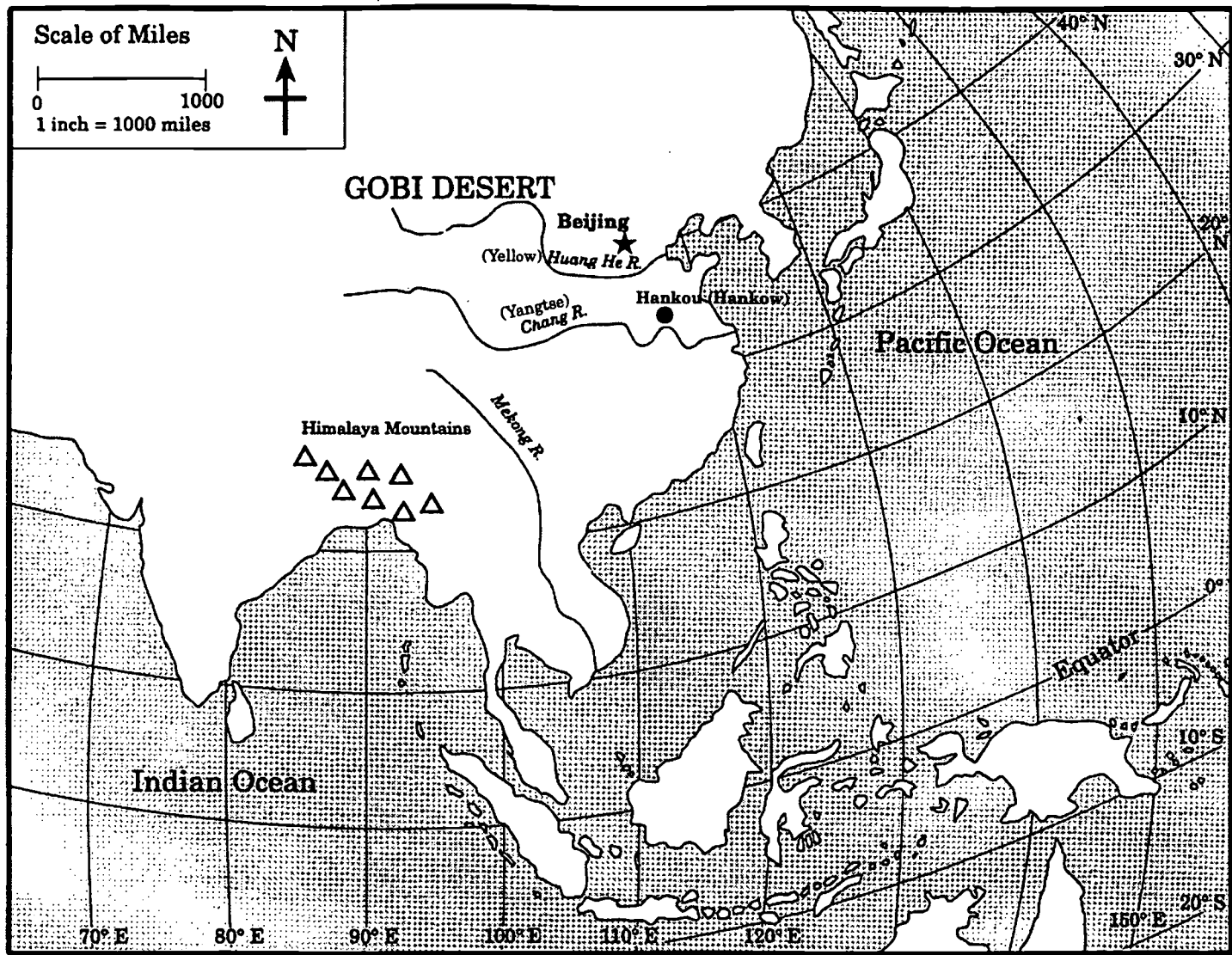
$\frac{0}{34\%}$        $\frac{1}{57\%}$        $\frac{2}{9\%}$

\_\_\_\_\_

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3. Using the information provided on the map, describe the location of the city of Hankou (Hankow) in relation to other features on the map. Be as accurate and specific as you can.

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$\frac{0}{5\%}$        $\frac{1}{64\%}$        $\frac{2}{27\%}$        $\frac{3}{3\%}$

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4. If you had to choose one word to describe the type of person Jean was as a ten-year-old, what would it be? Explain your choice using specific references from the passage.

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$\frac{0}{6\%}$       $\frac{1}{56\%}$       $\frac{2}{36\%}$       $\frac{3}{2\%}$

5. Do you think Jean's attitude of not feeling like a real American was based on factual information or emotion?

Explain your answer using specific references from the passage.

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$\frac{0}{11\%}$       $\frac{1}{56\%}$       $\frac{2}{31\%}$       $\frac{3}{2\%}$



6. Directions: Write a brief letter on the topic below.

**Each morning in the British school, the students sang "God Save the King."**

**Write a brief letter to Miss Williams trying to persuade her to accept your view on whether she should or should not require Jean to sing "God Save the King."**

**As you write your brief letter, remember to:**

- Be sure to persuade Miss Williams that the suggestion you give is the best one.
- Write in complete sentences.
- Check to be sure that you are writing good paragraphs.
- Use correct grammar, spelling, punctuation, and capitalization.

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<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>
8%	72%	19%	1%

7. Jean's school in Hankow has three floors. Each floor has eight classrooms. Each classroom is divided into a work section and a study section.

Miss Williams is in a section of a classroom somewhere in the school. What is the probability that the principal could locate Miss Williams on the first attempt?

\_\_\_\_\_

Explain or show how you determined your answer.

$\frac{0}{33\%}$        $\frac{1}{24\%}$        $\frac{2}{11\%}$        $\frac{3}{33\%}$

8. Jean knew that there were 134,338 books in the school library. She also knew that 133,519 had been listed in a new card catalog. She rounded to the nearest 10,000 to estimate how many more books had to be entered in the catalog. Using this approach, how many were left to enter?

\_\_\_\_\_ books

Explain or show what was wrong with her estimation procedure and provide a more appropriate procedure.

$\frac{0}{36\%}$        $\frac{1}{42\%}$        $\frac{2}{12\%}$        $\frac{3}{9\%}$





10. Jean's father conducts boat tours part-time on the Yangtse River. The length of a tour varies from 32 minutes to 48 minutes. He told Jean that he spent two hours leading four tours yesterday. Jean told him that wasn't possible. Which person was correct?

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Explain or show how you determined your answer.

$\frac{0}{32\%}$        $\frac{1}{36\%}$        $\frac{2}{33\%}$

11. A 1,200 square foot passenger deck is going to be built between the boat tour office building and the Yangtse River. A safety rail will be built around the four sides of the deck.

How many feet of railing will be needed to complete the job? \_\_\_\_\_ feet

Explain or show how you determined your answer.

$\frac{0}{83\%}$        $\frac{1}{8\%}$        $\frac{2}{4\%}$        $\frac{3}{6\%}$

Use the information in the chart below to answer question 12.

Body of Water	Area (sq. mi.)
Pacific Ocean	64,186
Atlantic Ocean	33,420
Indian Ocean	28,351
Arctic Ocean	5,106
South China Sea	1,149
Bering Sea	873
Sea of Japan	391
East China Sea	257
Red Sea	175

12. Jean knew that the largest body of water near Hankow was the Pacific Ocean. Using the information from the chart, how many times larger is the area of the Pacific Ocean than the *median* area of all the bodies of water listed in the chart?

\_\_\_\_\_ times larger

$\frac{0}{68\%}$        $\frac{1}{19\%}$        $\frac{2}{12\%}$



## Formulas

Rectangular or Triangular Prism  
with base area ( $B$ ) and height ( $h$ )

$$\text{Volume} = Bh$$

Circle with radius ( $r$ )

$$\text{Area} = \pi r^2$$

$$\text{Circumference} = 2\pi r$$

Cylinder with radius ( $r$ ) and height ( $h$ )

$$\text{Volume} = \pi r^2 h$$

$$\text{Surface Area} = 2\pi r h + 2\pi r^2$$

Triangle with base ( $b$ ) and height ( $h$ )

$$\text{Area} = \frac{1}{2}bh$$

Pyramid with base area ( $B$ ) and  
height ( $h$ )

$$\text{Volume} = \frac{1}{3}Bh$$

$$\text{Total Area} = \text{Surface Area} + B$$

Cone with radius ( $r$ ), height ( $h$ ), and  
slant height ( $l$ )

$$\text{Volume} = \frac{1}{3}\pi r^2 h$$

$$\text{Lateral Area} = \pi r l$$

$$\text{Total Area} = \pi r^2 + \pi r l$$

Use  $\pi = 3.14$  or  $\frac{22}{7}$

Hypotenuse ( $c$ ) of right triangle with  
base ( $b$ ) and altitude ( $a$ )

$$c^2 = a^2 + b^2$$

Appendix

Sample Individual Student Reports Grades 5 & 8

List of Charter Schools

# North Carolina Open-Ended Assessment

Student:  
Teacher:  
School:  
LEA:

Test Date: November 1997

Grade 5

## Definition of Open-Ended Assessment

The Open-Ended Assessments are designed to broadly measure higher level thinking skills by requiring students to apply or demonstrate skills beyond the recall level. They commonly require the integration of knowledge and skills from more than one curricular area. Instead of choosing from a list of provided possible answers, students are required to generate their responses by writing out their thoughts. Since the statewide test administration occurs in November, the grade 5 assessment measures grade 4 goals and objectives. Each student answers six reading and six mathematics open-ended questions. The student's number of score points in each subject area and the total combined score have been converted to a scale score, a percentile, and an achievement level.

## Achievement Level Descriptions

- I Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area(s) to be successful at this grade level.
- II Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area(s) and are minimally prepared to be successful at this grade level.
- III Students performing at this level consistently demonstrate mastery of knowledge and skills in the subject area(s) and are well-prepared to be successful at this grade level.
- IV Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at this grade level.

## Teacher's Comments

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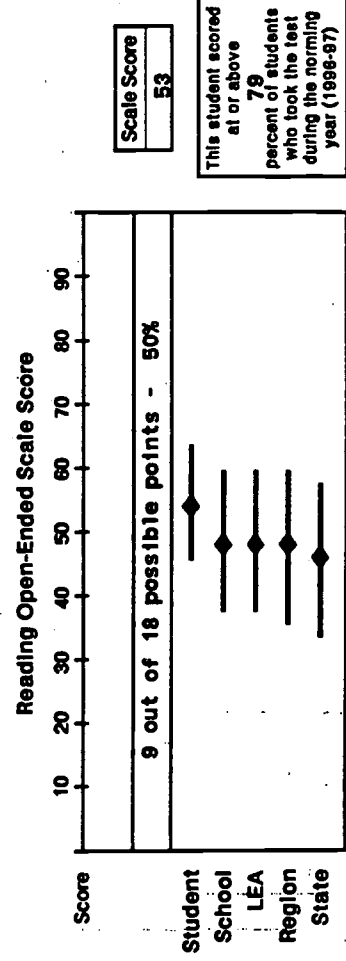
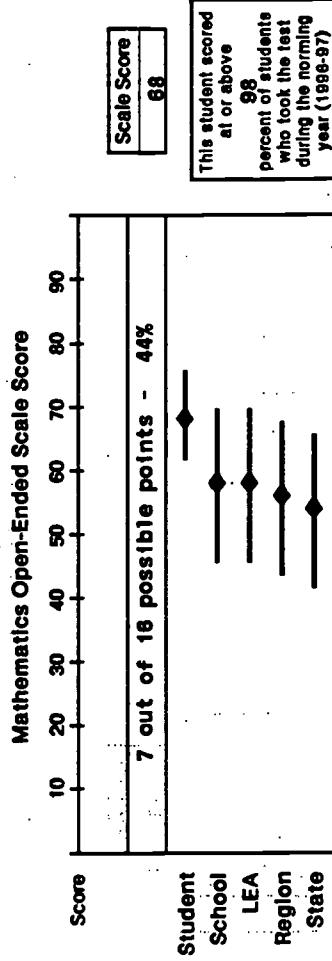
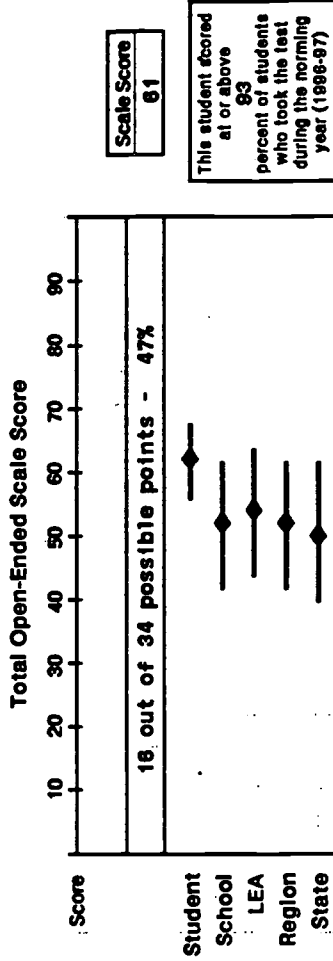
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## Explanation of Scoring Rules

For scoring purposes, there are general rubrics for reading and mathematics. The general rubric insures that the same level of expectation is maintained for all items within a content area. In addition to a general rubric, each item will have a specific scoring rubric that defines the level of expectation on a particular item. The levels will be consistent with the more generic levels of the general rubric. The number of score points in a rubric depends on the complexity of the item. Each student answers six reading and six mathematics open-ended questions. The student's number of score points in each subject area and the total combined score have been converted to a scale score, a percentile, and an achievement level. Below are the general mathematics and reading rubrics with sample student responses to one of this year's open-ended mathematics items.

### Mathematics General Rubric (4 point scale)

<u>Score Point</u>	<u>Description</u>
0	Answer does not address task, is unresponsive, or is inappropriate. Nothing is correct.
1	Answer addresses question but is only partially correct; something correct related to the question.
2	Answer deals correctly with most aspects of the question, but something is missing. May deal with all aspects of the question but have minor errors.
3	Answer deals with all parts of the question accurately and completely. All directions are followed.

### Reading General Rubric (4 point scale)

<u>Score Point</u>	<u>Description</u>
0	Answer is unresponsive, unrelated, or inappropriate.
1	Answer deals with material on a concrete, literal level that may be accurate in most dimensions.
2	Answer deals with most aspects of the question and makes correct inferences, although minor errors may exist. Comprehension is on an inferential level and the key skills are synthesis and analysis.
3	Answer addresses all aspects of the question, uses sound reasons, and cites and explains appropriate examples. Uses skills of evaluation as well as analysis and synthesis.

### SAMPLE 1

When Charles met the king, Charles weighed 1600 pounds. If his weight had doubled every year, how much did Charles weigh 4 years before he met the king?  
6,400 pounds

Explain or show how you determined your answer.

*All I did was said  $1600 \times 4 = 6400$*

**Score Point 0:** Response contains an incorrect weight and the work shown has no merit.

### SAMPLE 2

When Charles met the king, Charles weighed 1600 pounds. If his weight had doubled every year, how much did Charles weigh 4 years before he met the king?  
100 pounds

Explain or show how you determined your answer.

$$\begin{aligned} 1600 \div 2 &= 800 \\ 800 \div 2 &= 400 \\ 400 \div 2 &= 200 \\ 200 \div 2 &= 100 \end{aligned}$$

**Score Point 3:** Response contains the correct weight (100 pounds) and the work shown is complete and correct.



# North Carolina Open-Ended Assessment

## Definition of Open-Ended Assessment

The Open-Ended Assessments are designed to broadly measure higher level thinking skills by requiring students to apply or demonstrate skills beyond the recall level. They commonly require the integration of knowledge and skills from more than one curricular area. Instead of choosing from a list of provided possible answers, students are required to generate their responses by writing out their thoughts. Since the statewide test administration occurs in November, the grade 8 assessment measures grade 7 goals and objectives. Each student answers six reading and six mathematics open-ended questions. The student's number of score points in each subject area and the total combined score have been converted to a scale score, a percentile, and an achievement level.

## Achievement Level Descriptions

- I Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area(s) to be successful at this grade level.
- II Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area(s) and are minimally prepared to be successful at this grade level.
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## Teacher's Comments

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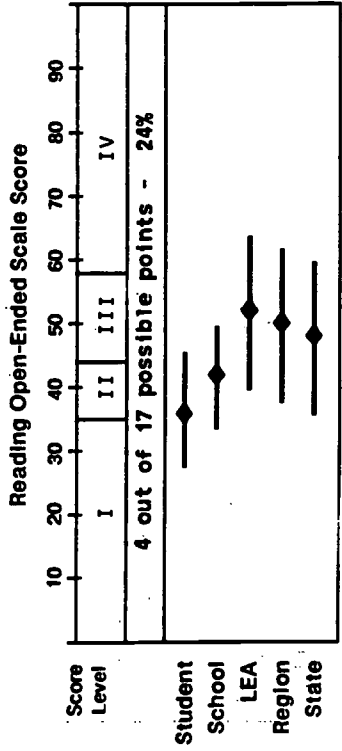
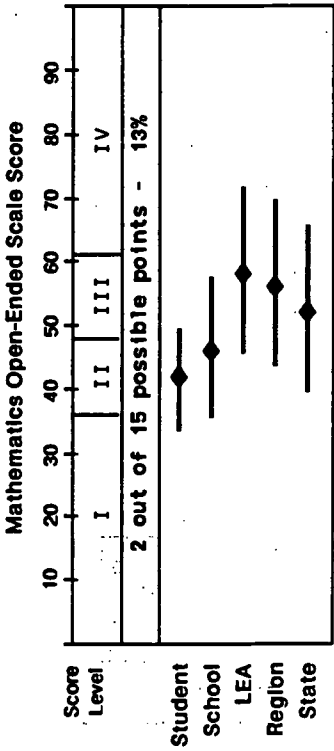
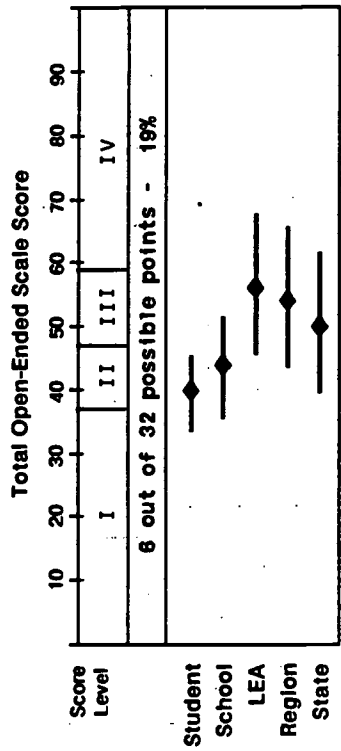


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Student:  
Teacher:  
School:  
LEA:  
Test Date: November 1997





## Explanation of Scoring Rules

For scoring purposes, there are general rubrics for reading and mathematics. The general rubric insures that the same level of expectation is maintained for all items within a content area. In addition to a general rubric, each item will have a specific scoring rubric that defines the level of expectation on a particular item. The levels will be consistent with the more generic levels of the general rubric. The number of score points in a rubric depends on the complexity of the item. Each student answers six reading and six mathematics open-ended questions. The student's number of score points in each subject area and the total combined score have been converted to a scale score, a percentile, and an achievement level. Below are the general mathematics and reading rubrics with sample student responses to one of this year's open-ended mathematics items.

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<u>Score Point</u>	<u>Description</u>
0	Answer is unresponsive, unrelated, or inappropriate.
1	Answer deals with material on a concrete, literal level that may be accurate in most dimensions.
2	Answer deals with most aspects of the question and makes correct inferences, although minor errors may exist. Comprehension is on an inferential level and the key skills are synthesis and analysis.
3	Answer addresses all aspects of the question, uses sound reasons, and cites and explains appropriate examples. Uses skills of evaluation as well as analysis and synthesis.

92

### SAMPLE 1

A 1,200 square foot passenger deck is going to be built between the boat tour office building and the Yangtze River. A safety rail will be built around the four sides of the deck.

How many feet of railing will be needed to complete the job? 300 ft feet

Explain or show how you determined your answer.

*I divided the 1,200 square-foot by the four sides and got 300 ft.*

Score Point 0: Response is inappropriate.

### SAMPLE 2

A 1,200 square foot passenger deck is going to be built between the boat tour office building and the Yangtze River. A safety rail will be built around the four sides of the deck.

How many feet of railing will be needed to complete the job? 198 feet feet

Explain or show how you determined your answer.

*I used the length as 50 feet and the width as 24 feet. Multiplying these together gives you the area of 1,200 square feet. The perimeter is 2 x length + 2 x w. Using this formula gives you 148 feet for railing. This solution could vary with the different lengths and widths for the deck*

Score Point 3: Response contains a possible number of feet of railing and the written explanation is complete and correct.

93

**List of Charter Schools  
Participating in the 1997-98 North Carolina Open-Ended Assessment**

Arapahoe Charter School  
Bonner Academy  
Bridges Charter School  
Bright Horizons Charter  
Carter G. Woodson School of Challenge  
Charter Public School  
Chatham Charter School  
Communities in Schools Academy  
Community Charter School  
Englemann School of Arts and Sciences  
Francine Delany New School for Children  
Grandfather Academy  
L.I.F.T. Charter  
Lakeside School  
Magellan Charter School  
MAST Charter School  
Nguzo Sabo Charter School  
Orange County Charter School  
Quality Education Academy  
Right Step Academy  
Sallie B. Howard Charter School  
School in the Community  
Sterling Montessori Academy  
Summit Charter School of Arts and Science  
The Learning Center  
United Children Ability Nook (UCAN)  
Village Charter School



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