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ABSTRACT

The North Carolina State Board of Education, as part of the Quality Assurance Program, established a computer proficiency requirement for students in grade eight for the 1996-97 school year and beyond in order to receive a North Carolina high school diploma. The first opportunity to meet the requirement is during the eighth grade. Passing the computer skills standard requires passing both the multiple-choice and performance tests. For the 1996-97 school year, 67.4% of the first-time test takers and 74.8% of all students who took the tests met the requirement. A higher percentage of females (79.1% for all females) than males (70.6% for all males) who took the test passed during the 1996-97 school year. There were wide disparities in performance among subgroups, with the Black (55.0% overall) and Hispanic (56.9% overall) subgroups having lower percentages passing than the Asian (81.6% overall) and White (84.4% overall) subgroups. There were also wide disparities in performance among the different categories of exceptionality. Approximately 33.5% of the students identified as limited English proficient who took the computer skills test met the requirement. The report includes graphs and tables illustrating results, sample questions and answers, and result data by county and region. (SWC)

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Report of Student Performance Report of on the North Carolina Tests of Computer Skills

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Reporting on the Class of 2001 for the state and 117 public school systems

Published February 1998

Public Schools of North Carolina State Board of Education Department of Public Instruction Instructional and Accountability Services / Testing Section Division of Accountability Sevices

Executive Summary 1996-97 Report of Student Performance North Carolina Tests of Computer Skills (Multiple-Choice and Performance)

Background

- The State Board of Education, as part of the Quality Assurance Program, initially established a computer proficiency requirement for diplomas issued to the class of 2000. In October of 1995, the Board modified the requirement by making it effective beginning with the graduating class of 2001. Students who were in grade eight for the 1996-97 school year and beyond are required to satisfy the computer proficiency requirement in order to receive a North Carolina high school diploma.
- The first opportunity to meet the computer skills proficiency requirement is during the eighth grade. Passing the computer skills standard is defined as passing both the multiple-choice and performance tests.
- The Class of 2001 completed the eighth grade at the end of the 1996-97 school year.

Findings

- For the 1996-97 school year, 67.4 percent of the first-time test takers and 74.8 percent of all students who took the tests met the requirement.
- A higher percentage of females (71.8 for first-time test takers and 79.1 for all females) than males (63.1 for first-time test takers and 70.6 for all males) who took the test passed during the 1996-97 school year.
- There were wide disparities in performance among subgroups. The Black (46.0 for first-time test takers and 55.0 overall) and Hispanic subgroups (49.6 for first-time test takers and 56.9 overall) had lower percentages passing than the Asian (75.1 for first-time test takers and 81.6 overall) and White (78.0 for first-time test takers and 84.4 overall) subgroups. The percents passing for other groups were: American Indian students (45.7 for first-time test takers and 60.6 percent overall), Other students 64.1 for first-time test takers and 70.5 overall), and Multi-Racial students (68.1 for first-time test takers and 74.8 overall).
- There were wide disparities in performance among the different categories of exceptionality for all students who took the test during the 1996-97 school year. The percents passing for each exceptionality were: 98.7 percent of academically gifted students, 31.4 percent of behaviorally-emotionally handicapped, 50.0 percent of hearing impaired, 8.3 percent of educable mentally handicapped, 46.3 percent of specific learning disabled, 45.5 percent of speech-language impaired, 48.7 percent of visually impaired, 48.4 percent of other health impaired, 45.5 percent of orthopedically impaired, and 54.0 percent of other exceptional classifications.

Students with Limited English Proficiency

 Approximately 33.5 percent of the students identified as limited English proficient who took the computer skills tests during the 1996-97 school year met the requirement.

Attachment

• A copy of the 1996-97 Report of Student Performance on the North Carolina Tests of Computer Skills is attached.



1996-97 Report of Student Performance North Carolina Tests of Computer Skills (Multiple-Choice and Performance) Introduction

The State Board of Education, as part of the Quality Assurance Program, initially established a computer proficiency requirement for diplomas issued to the class of 2000. In October of 1995 the Board modified the requirement by making it effective beginning with the graduating class of 2001. Students who were in grade eight for the 1996-97 school year and later will be required to satisfy the computer proficiency requirement in order to receive a North Carolina high school diploma. The requirement is based on the kindergarten through grade 8 competencies of the K-12 computer skills curriculum approved in July 1992 by the State Board of Education. These competencies are defined in the North Carolina Standard Course of Study (SCS). The goals of the requirement are to ensure that: (1) most students enter high school with sufficient computer skills, and (2) no student exits North Carolina high schools without sufficient computer skills.

The North Carolina Tests of Computer Skills (multiple-choice and performance) must be administered by the end of grade eight with subsequent opportunities during high school, as needed, to allow students to satisfy the requirement before completing their senior year in high school. The multiple-choice test assesses (1) word processing, (2) keyboarding, (3) database use, (4) spreadsheet use, (5) telecomputing skills, (6) societal issues, (7) ethics, (8) terms, operations, and care of computers, and (9) the use of computers in various curricular areas. The performance test consists of four parts: keyboarding techniques, word processing/editing, database use, and spreadsheet use.

Computers have become an integral part of today's world, both in the home and in the marketplace; therefore, it is necessary to prepare students to be independent users of technology to meet their personal and school needs. Proficiency in computer use is a necessary skill for graduates of North Carolina's high schools as the world becomes increasingly more dependent upon the use of technology.

- The North Carolina Test of Computer Skills was initially implemented as a graduation requirement effective with students who were in grade 8 during the 1996-97 school year (Class of 2001).
- Initially, in order to meet the requirement, students were required to achieve a scale score on the performance part of the test equal to or greater than 49 <u>and</u> a combined scale score equal to or greater than 46. Under the old standard when the pass/fail status was assigned, it was assigned for student performance for both parts of the test. The multiple-choice and performance parts of the test were not separated but considered together in determining a student's pass/fail status.
- At the recommendation of the Computer Skills Advisory Committee after input from educators and others, the State Board of Education modified the standard for passing the computer skills requirement effective July 1, 1997. The modified standard requires that the test be separated into two tests: a multiple-choice test and a performance test. Either test may be passed independently of the other. To pass under the new standard, a student must achieve a performance test scale score of 49 or above and a multiple-choice test scale score of 47 or above.

For the 1996-97 school year, to determine each student's pass/fail status, test scores were analyzed using each of the following methods:



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- Students who passed under the old standard during the fall 1996 test administration were granted PASS on both the multiple-choice status and the performance status. (Note: Students with multiple-choice scores that were considerably less than 47 can possibly receive a status of PASS on the multiple-choice test because status was determined using a combined score.)
- Students who received a score of 49 or above on the performance test during any of the test administrations and on any of the forms using either of the standards described above received a status of PASS.
- Students who received a score of 47 or above on the multiple-choice test during any of the test administrations and on any of the forms using either of the rules described above received a status of PASS.

Beginning with the fall of 1997 the North Carolina Tests of Computer Skills is being administered and scored as two separate tests. Students in the eighth grade in 1997-98 and later must pass each one of the tests independently of the other in order to meet the computer proficiency graduation requirement. When documented through the Individualized Education Program (IEP), students with disabilities may fulfill the computer skills proficiency requirement through the use of portfolio assessment.

The purpose of this document is to report the performance of students in the class of 2001 as eighth graders (current ninth graders) on the computer skills tests. Sample questions have been included in the report to provide examples of items included on the tests.



1996-97 Report of Student Performance North Carolina Tests of Computer Skills

Background

- The State Board of Education, as part of the Quality Assurance Program, initially established a computer proficiency requirement for diplomas issued to the class of 2000. In October of 1995 the Board modified the requirement by making it effective beginning with the graduating class of 2001. Students who were in grade eight for the 1996-97 school year and beyond will be required to satisfy the computer proficiency requirement in order to receive a North Carolina high school diploma.
- The first opportunity to meet the computer skills proficiency requirement is during the eighth grade. Passing the computer skills standard is defined as passing both the multiple-choice and performance tests.

The Standard

- For students tested during the 1996-97 school year, and students tested during the summer of 1997, the requirements were:
 - A combined scale score of 46 and a performance scale score of 49 or
 - A multiple-choice scale score of 47 and a performance scale score of 49.
- Beginning with the fall 1997 testing, a student must have a scale score of at least 47 on the multiple-choice test and a scale score of at least 49 on the performance.
- Students are retested only on the test that they have not passed.

Computer Skills Requirement Guidelines

- Beginning with students in the eighth grade during the 1996-97 school year, in order to receive a North Carolina high school diploma students must demonstrate computer skills proficiency.
- Each student must have at least one opportunity each year to take the test beginning with their eighth grade year until all requirements have been met, but no more than three opportunities in a school year. (Students must be tested in the ninth grade if they have not met the requirement.)
- Seniors may have one additional testing opportunity during the last month of the spring semester prior to graduation.
- Beginning with the eighth grade, a student must be provided focused instructional assistance (remediation) when the student has not demonstrated proficiency on the multiple-choice or performance tests until the proficiency requirement has been met.



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Testing Modifications

- Modifications are available for students with disabilities, students identified under section 504 of the Rehabilitation Act of 1973, and students who are limited English proficient.
- The most recent publications of Testing Modifications and Accommodations for Students with Disabilities and Guidelines for Testing Students with Limited English Proficiency should be reviewed when developing testing plans for students.
- The need for modifications and accommodations must be documented (for example, in the student's Individualized Education Program (IEP) or Written Accommodation Plan). Modifications should be consistent with routine instructional use and must not violate the intent of the test.

The Computer Skills Portfolio

- The expectation is that all students will take the test during the eighth grade. The portfolio assessment is available for students with disabilities (only) with documentation on the Individualized Education Program (IEP).
- The portfolio assessment is available for those students with disabilities (only) who cannot take the test under standard administration conditions or with the modifications provided for the tests.
- The purpose of portfolio assessment is not to provide an easier alternative to demonstrating competency, but to provide an appropriate alternative that meets the same high standards as the tests.
- All modifications and/or the need for portfolio assessment must be documented.
- There is no time limit for completion of the portfolio except that successful completion is required prior to graduation.
- The expectation is that work to be included in the portfolio will be completed within the school setting over a period of time. The student's teacher and principal must verify the authenticity of the student's portfolio work.

Scoring Portfolios

- The LEA is responsible for scoring all portfolios for that system.
- The LEA test coordinator, the exceptional children's administrator, and the computer coordinator provide direction for the scoring and approval process for completed portfolios. The LEA may involve other personnel as deemed appropriate.



Exemptions from Testing

- Exemption from testing does not exempt students from the graduation requirement. Exemption from the computer proficiency requirement denies the opportunity for the student to meet one of the requirements for a North Carolina high school diploma.
- When a student is exempted, the parent and student are advised of the long-term consequences of exemption. LEAs are to reference the most recent publications of Testing Modifications and Accommodations for Students with Disabilities and Guidelines for Testing Students with Limited English Proficiency for proper procedures to follow for exemptions.

Resources Provided by NCDPI

- Lesson plans and staff development activities were provided by the NCDPI since the computer skills curriculum was revised in 1992. Some of the lesson plans are available on the DPI InfoWeb and through publications.
- A released form of the computer skills test was provided to all LEAs. Copies have been provided at conferences and workshop presentations. In addition, a copy is available on the DPI web page.

Data Verification

 For the 1996-97 school year, the North Carolina Tests of Computer Skills were scored centrally. Each LEA was asked to verify the number of students tested to provide an unduplicated count of students taking and passing the computer skills tests in each LEA.

1996-97 Student Performance

• For the 1996-97 school year, 74.8 percent of all students who took the tests met the requirement.

Performance by First-time Test Takers

• For the 1996-97 school year, 67.4 percent of the first-time test takers who took the tests met the requirement.

Performance by First-time Test Takers by Gender

• A higher percentage of first-time test takers who were female (71.8 percent) than first-time test takers who were male (63.1 percent) who took the tests met the requirement.

Performance by First-time Test Takers by Ethnicity

• There were wide disparities in performance among subgroups for first-time test takers. For the 1996-97 school year Black, American Indian, and Hispanic subgroups had lower percentages passing than the Asian and White subgroups. The percents passing for each subgroup were: 46.0 percent of Black students, 45.7 percent of American Indian students, 49.6 percent of Hispanic students, 64.1 percent of Other students, 68.1 percent of Multi-Racial students, 75.1 percent of Asian students, and 78.0 percent of White students.



Performance By Gender (all students)

• During the 1996-97 school year, a higher percentage of females (79.1 percent) than males (70.6 percent) who took the tests met the requirement.

Performance By Ethnicity (all students)

• There were wide disparities in performance among subgroups. The Black and Hispanic subgroups had lower percentages passing than the Asian and White subgroups. The percents passing for each subgroup were: 55.0 percent of Black students, 56.9 percent of Hispanic students, 60.6 percent of American Indian students, 70.5 percent of Other students, 74.8 percent of Multi-Racial students, 81.6 percent of Asian students, and 84.4 percent of White students.

Limited English Proficient (all students)

• Approximately 33.5 percent of students who are limited English proficient who took the tests met the requirement.

Performance By Exceptionality (all students)

• There were wide disparities in performance among the different areas of exceptionality. The percents passing for each exceptionality were: 98.7 percent of academically gifted students, 31.4 percent of behaviorally-emotionally handicapped, 50.0 percent of hearing impaired, 8.3 percent of educable mentally handicapped, 46.3 percent of specific learning disabled, 45.5 percent of speech-language impaired, 48.7 percent of visually impaired, 48.4 percent of other health impaired, 45.5 percent of orthopedically impaired, and 54.0 percent of other exceptional classifications.

Modifications

• Students with disabilities or students who are limited English proficient may have modifications during testing provided the modifications are documented and do not violate the validity of the tests. Modifications should be used routinely during classroom instruction. Students used a number of modifications during the computer skills test administrations. Some students used more than one modification during the test administration.

Modifications for Students with Disabilities

• Large print, dictation to a scribe, student marks in test book, test administrator reads test aloud, multiple test sessions, extended time, and testing in a separate room were the most frequently used modifications for the computer skills tests for students with disabilities. The percents passing for each modification were: 33.3 percent for large print, 48.0 percent for dictation to a scribe, 43.5 percent for student marks in test book, 30.2 percent for test administrator reads test aloud, 34.6 percent for multiple test sessions, 38.4 percent for extended time, and 33.2 percent for testing in a separate room.



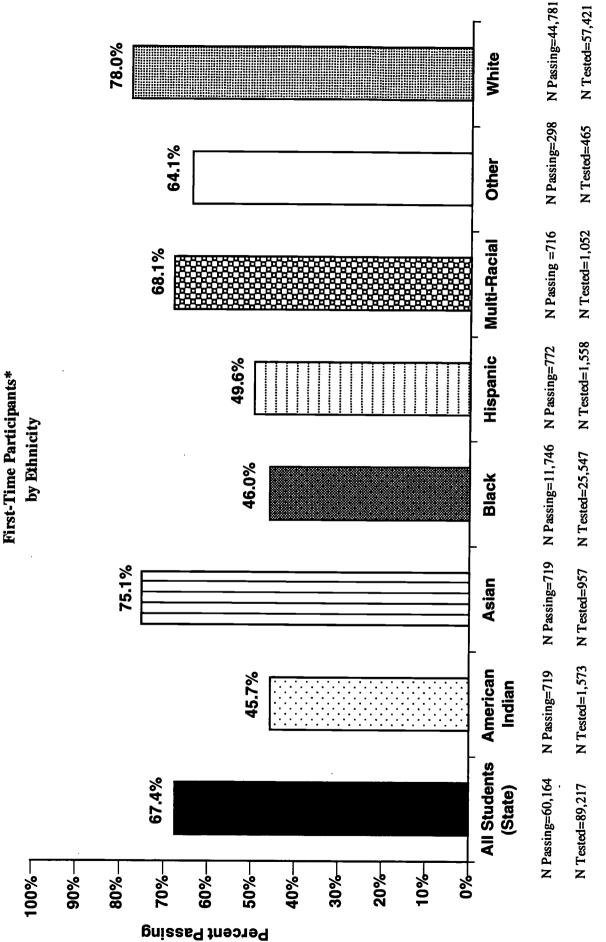
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Modifications Students with Limited English Proficiency

• The modifications used by limited English proficient students were testing in a separate room, extended time, multiple test sessions, test administrator reads test aloud in English, student marks in test book, and English/native language dictionary or English/native language electronic translator. The percents passing for each modification were: 25.2 percent for testing in a separate room, 29.6 percent for extended time, 28.2 percent for multiple test sessions, 23.9 percent for test administrator reads test aloud in English, 33.3 percent for student marks in test book, and 23.1 percent for English/native language dictionary or English/native language electronic translator.



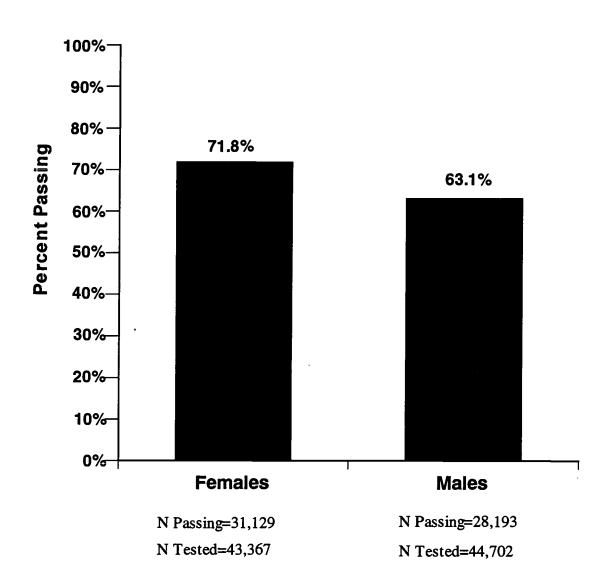
North Carolina Test of Computer Skills (Multiple-Choice and Performance) 1996-97 Report of Student Performance



*First-Time participants include all students that tested in fall 1996 and students that tested only in spring 1997.



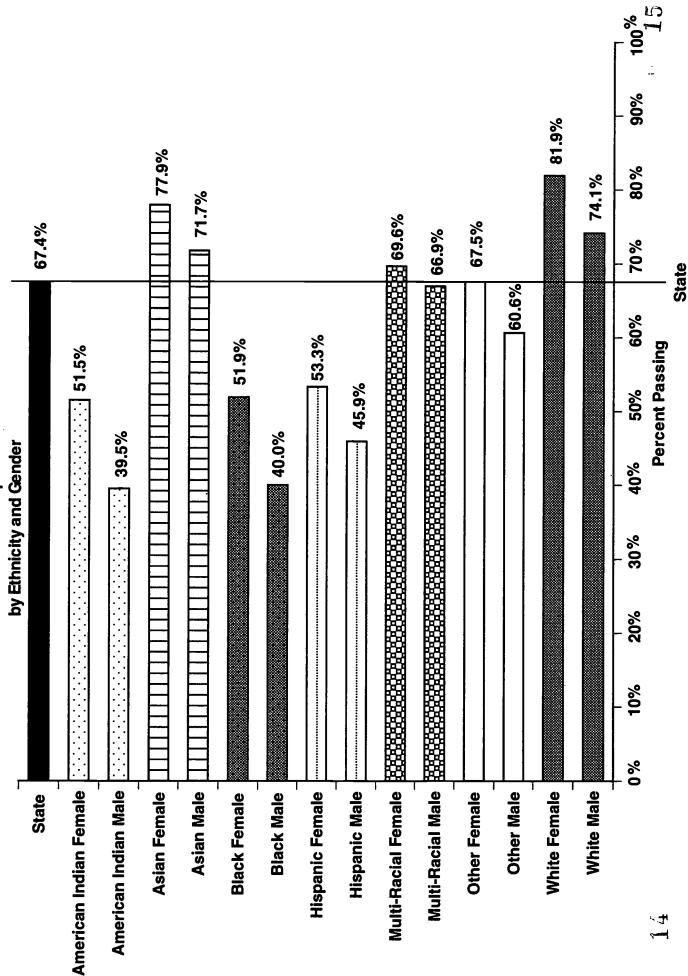
1996-97 Report of Student Performance North Carolina Test of Computer Skills (Multiple-Choice and Performance) First-Time Participants* by Gender





^{*}First-Time participants include all students that tested in fall 1996 and students that tested only in spring 1997.

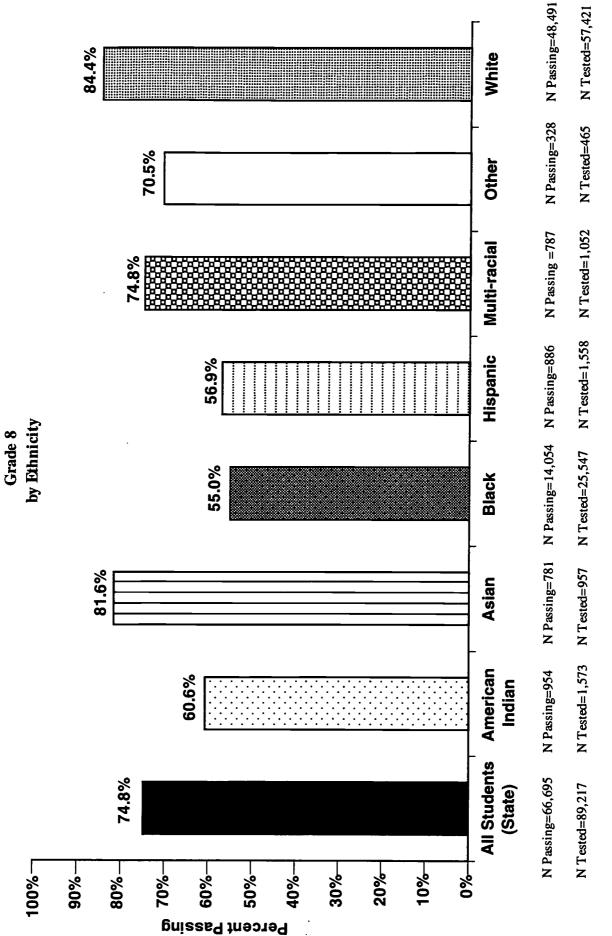
North Carolina Test of Computer Skills (Multiple-Choice and Performance) 1996-97 Report of Student Performance **First-Time Participants***



*First-Time participants include all students that tested in fall 1996 and students that tested only in spring 1997.



North Carolina Test of Computer Skills (Multiple-Choice and Performance) 1996-97 Report of Student Performance*



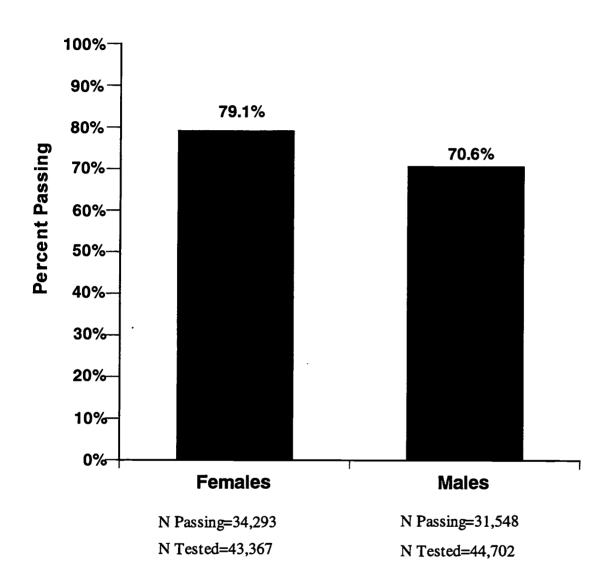
*These data represent the highest test score of each student for all test administrations in which the student participated.

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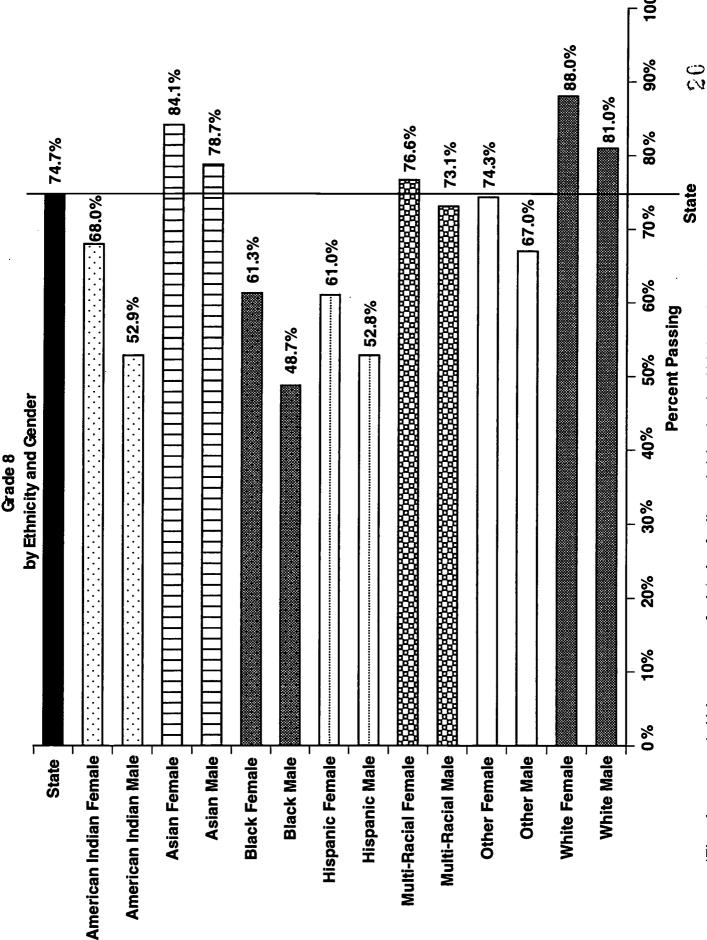
1996-97 Report of Student Performance* North Carolina Test of Computer Skills (Multiple-Choice and Performance) Grade 8 by Gender



^{*}These data represent the highest test score of each student for all test administrations in which the student participated.



North Carolina Test of Computer Skills (Multiple-Choice and Performance) 1996-97 Report of Student Performance*



*These data represent the highest test score of each student for all test administrations in which the student participated.



1996-97 Report of Student Performance* North Carolina Test of Computer Skills (Multiple-Choice and Performance) Grade 8

Characteristics and Average Performance**

	Number Tested	Number Passing	Percent Passing	
All Students	89,217	66,695	74.8%	
IASA Title I Program (participation)				
No	77,296	58,795	76.1%	
Yes, School-Wide Program	8.730	5.577	63.9%	
Yes, Targeted Assistance Program	1.192	684	57.4%	
Yes, Migrant Program	99	37	37.4%	e erro en momentermente organi
Exceptionality				
Not Exceptional	65,879	49,412	75.0%	
Academically Gifted	- many the same	was was and and		***** * 19 \$ 1984.
Behaviorally-Emotionally Handicapped	11,853	11,704	98.7%	
	882	277	31.4%	
Hearing Impaired	114	57	50.0%	recording to the second
Educable Mentally Handicapped	1,195	99	8.3%	· · · · · · · · · · · · · · · · · · ·
Specific Learning Disabled ***	5,438	2,517	46.3%	
Learning Disabled- Reading	3,556	1,444	40.6%	
Learning Disabled- Mathematics	2,375	887	37.3%	
Learning Disabled-Written Expression	4,649	2,111	45.4%	terror against them a management
Learning Disabled- Other	182	78	42.9%	Marine e all et a specie palletine e :
Speech-Language Impaired	154	70	45.5%	
Visually Impaired	39	19	48.7%	
Other Health Impaired	574	278	48.4%	
Orthopedically Impaired	The second secon		manage, and the comment of the comme	22 April 41 1204
Fraumatic Brain Injured	44	20	45.5%	
Other Exceptional Classifications	22	· · · · · · · · · · · · · · · · · · ·	*	
•	100	54	54.0%	
Section 504	347	179	51.6%	The Management of Management o
Section 504	347	179	51.6%	The second of th
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Section 504	347	179	51.6%	
Section 504 Limited English Proficiency	347	179	51.6%	
Section 504 Limited English Proficiency Modifications (Exceptionality)	636	213	51.6%	
Section 504 Limited English Proficiency Modifications (Exceptionality) Braille Edition Large Print Edition	347 636 5 33	179	51.6%	
Section 504 Limited English Proficiency Modifications (Exceptionality) Braille Edition Assistive Technology	347 636 5 33 4	213	51.6%	
Section 504 Limited English Proficiency Modifications (Exceptionality) Braille Edition Assistive Technology Braille Writer	347 636 5 33 4	213 * 11	\$1.6% 33.5% 33.3%	
Section 504 Limited English Proficiency Modifications (Exceptionality) Braille Edition Assistive Technology Braille Writer Dictation to Scribe	347 636 5 33 4 1 75	213	51.6%	
Section 504 Limited English Proficiency Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test	347 636 5 33 4 1 75 13	213 * 11	\$1.6% 33.5% 33.3%	
Section 504 Limited English Proficiency Modifications (Exceptionality) Braille Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices	347 636 5 33 4 1 75 13	179 213 * 11 * 36 * *	51.6% 33.5% 33.3% ** 48.0%	
Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book	347 636 5 33 4 1 75 13 9	179 213 * 11 * 36 * 371	51.6% 33.5% 33.3% * 48.0% * 43.5%	
Modifications (Exceptionality) Braille Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book Fest Administrator	347 636 5 33 4 1 75 13	179 213 * 11 * 36 * *	51.6% 33.5% 33.3% ** 48.0%	
Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book Fest Administrator Typewriter or Word Processor	347 636 5 33 4 1 75 13 9	179 213 * 11 * 36 * 371	51.6% 33.5% 33.3% * 48.0% * 43.5%	
Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book Test Administrator Typewriter or Word Processor Hospital/Home Testing	347 636 5 33 4 1 75 13 9 852 2,641	179 213 * 11 * 36 * 371	51.6% 33.5% 33.3% * 48.0% * 43.5%	
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Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book Test Administrator Typewriter or Word Processor Hospital/Home Testing	347 636 5 33 4 1 75 13 9 852 2,641 10 10 211	213 213 11 11 36 4 371 798 4 73	\$1.6% 33.5% 33.3% ** 48.0% ** 43.5% 30.2% ** 34.6%	
Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book Test Administrator Typewriter or Word Processor Hospital/Home Testing Multiple Test Sessions	347 636 5 33 4 1 75 13 9 852 2,641 10 10	213 213 * 11 * 36 * 371 798 *	\$1.6% 33.5% 33.3% 48.0% 43.5% 30.2%	
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Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book Test Administrator Typewriter or Word Processor Hospital/Home Testing Multiple Test Sessions Extended Time Testing (Separate Room) Modifications (LEP) Testing (Separate Room) Extended Time Multiple Test Sessions Cest Administrator	347 636 5 33 4 1 75 13 9 852 2,641 10 10 211 3,777 3,697	179 213 * 11 * 36 * * 371 798 * * 1,229 75 87 11 49	\$1.6% 33.5% 33.3% * 48.0% * 43.5% 30.2% * 34.6% 38.4% 33.2% 25.2% 29.6% 28.2% 23.9%	
Modifications (Exceptionality) Braille Edition Large Print Edition Assistive Technology Braille Writer Dictation to Scribe Interpreter Signs Test Magnifications Devices Student Marks in Test Book Fest Administrator Typewriter or Word Processor Hospital/Home Testing Multiple Test Sessions Extended Time Festing (Separate Room) Modifications (LEP) Festing (Separate Room) Extended Time Multiple Test Sessions	347 636 5 33 4 1 75 13 9 852 2,641 10 10 211 3,777 3,697	213 213 213 11 4 36 4 371 798 4 73 1,449 1,229	\$1.6% 33.5% 33.3% ** 48.0% ** 43.5% 30.2% ** 34.6% 38.4% 33.2% 25.2% 29.6% 28.2%	

Notes: *Data were deleted where number tested was less than thirty.

^{***} The total Specific Learned Disabled number tested does not equal the totals as Learning Disabled in reading, math, written expression, and other. Students may qualify in services in more than one area.



^{**}These data represent the highest test score of each student for all the test administrations in which the student participated.

1996-97 Report of Student Performance*

North Carolina Test of Computer Skills (Multiple Choice and Perfomance) Grade 8

Characteristics and Average Performance

	Number	Number	Percent
	Tested	Passing	Passing
Il Students	89.217	66,695	74.8%
Computer Access (outside of class)	03.217	00.093	14,8%
lo			
es, on occasion	26,561	16,066	60.5%
cs. all the time	24,718	17,623	71.3%
cs. an the time	35,651	31.459	88.2%
Computer Access (school work)			
lo .	37,045	24.845	67.10
'es	48,827	39,489	67.1% 80.9%
			001770
ocation (at school) Regular classroom			
Computer lab	10.307	7.623	74.0%
Aedia center/Library	52.709	40,026	75.9%
•	14,927	10.822	72.5%
Other	3,088	1.927	62.4%
Computer Skills (sources)			
ome	42,313	36.451	06 10
riend's house	42.313 27.840		86.1%
omputer class	76,776	22.982	82.6%
egular class	36.610	57.898	75.4%
ourse outside of school	5,006	29.223	79.8%
computer camp		3.898	77.9%
ther	2.256	1,664	73.8%
	12,954	10.129	78.2%
omputer Related Work (time/wk)			
o homework assigned	33.078	22.890	69.2%
ess than one hour	23,837	18.720	78.5%
etween one and three hours	18.119	14,713	81.2%
fore than three, less than five hours	6.186	4.911	79.4%
etween five and ten hours	2.849	2,241	78.7%
fore than ten hours	707	519	73.4%
on't do homework	1.105	530	48.0%
Word December (1) 114			
Vord Processing (ability) elow average			
verage	4,444	2.210	49.7%
bove Average	39,833	29,793	74.8%
xcellent	19.575	17,154	87.6%
on't know	10.821	9,385	86.7%
on t know	11.441	6.159	53.8%
atabases (ability)			
elow average	6.592	3,730	56 AOL
verage	44.466	34,416	56.6%
bove Average	16.353		77.4%
xcellent	6.152	14,1 52 4,985	86.5%
on't know	12.610	4,985 7,434	81.0% 50.0 %
	12.010	1,434	59.0%
oreadsheets (ability)			
elow average	6,709	3,807	56.7%
verage	40.997	31.550	77.0%
bove Average	18.588	15.832	85.2%
ccellent	8.705	7.133	81.9%
on't know	10.951	6.273	57.3%
elecompute (ability)			
clow average	12 700	0.51=	
verage	13.780	9,547	69.3%
pove Average	20.954	16.267	77.6%
cellent	7,133	5,899	82.7%
on't know	5.008 38,432	4.150 28.206	82.9%
	30,434	28,206	73.4%
eneral Computer Use			
clow average	6.629	3,994	60.3%
verage	32.374	23.598	72.9%
bove Average	22,424	18,813	83.9%
cellent	16,936	14.202	83.9%
on't know	7 154	2 410	50 cm
hese data represent the highest test score of each stu	/ 1.1.J. T	2.010	JU.070



1996-97 Report of Student Performance* North Carolina Test of Computer Skills (Multiple-Choice and Performance) Grade 8 by Exceptionality**

Category	Number	Number	Percent
and the second of the second o	Tested	Passed	Passing
All Students	89,217	66,695	74.8%
Not Exceptional	65,879	49,412	75.0%
Academically Gifted	11,853	11,704	98.7%
Behaviorally-Emotionally Handicapped	882	277	31.4%
Hearing Impaired	114	57	50.0%
Educable Mentally Handicapped	1,195	99	8.3%
Specific Learning Disabled	5,438	2,517	46.3%
Speech-Language Impaired	154	70	45.5%
Visually Impaired	39	19	48.7%
Other Health Impaired	574	278	48.4%
Orthopedically Impaired	44	20	45.5%
Traumatic Brain Injured	22	*	*
Other Exceptional Classifications	100	54	54.0%

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



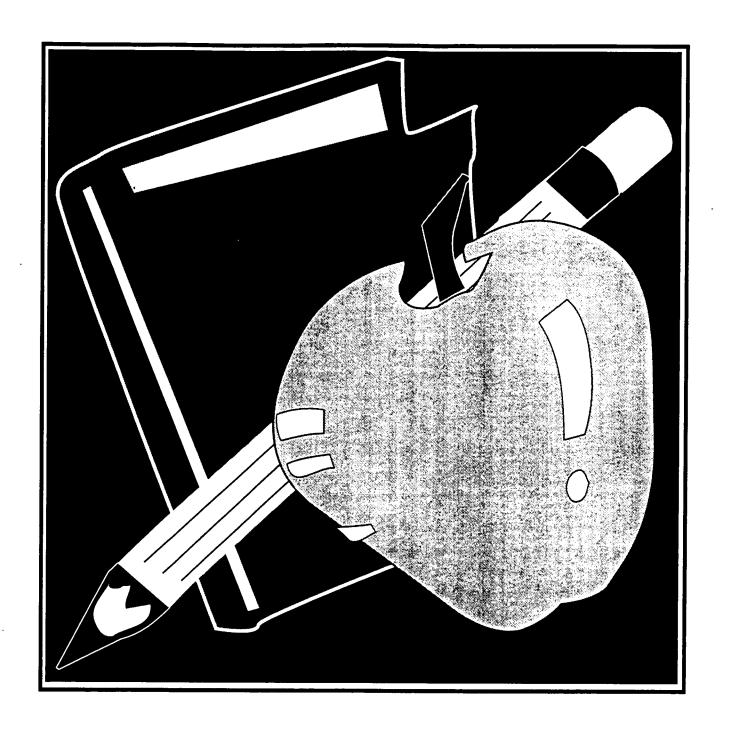
^{**}These data represent the highest test score of each student for all the test administrations in which the student participated.

1996-97 Report of Student Perfomance* North Carolina Test of Computer Skills (Multiple-Choice and Performance) Grade 8 by LEA

Below 50%	60-69%	70-79%	80-89%	90% or above
N=6	N=25	N=40	N=36	N=5
Weldon City	Kannapolis City	Winston-Salem/Forsyth	Rowan	Yancey
Halifax	Franklin	Avery	Rutherford	Watauga
Pasquotank	Hyde	Roanoke Rapids City	Haywood	Dare
Hertford	Richmond	Wayne	Stokes	Graham
Warren	Robeson	Caswell	Johnston	Elkin City
Vance	Scotland	Shelby City	Mooresville City	Dikin City
	Anson	Cleveland	Jackson	
	Thomasville City	Gaston	Chatham	
	Nash/Rocky Mount	Wilson	Wake	,
50-59%	Lenoir	Brunswick	Lincoln	
N=5	McDowell	Gates	Henderson	
11-5	Edgecombe	Martin	Orange	
Hoke	Bertie	Mitchell	Newton-Conover	
Bladen	Currituck	Edenton/Chowan	Randolph	
Washington	Northampton	Madison	Wilkes	
Lexington City	Charlotte/Mecklenburg	Rockingham	Macon	
Pender	Cumberland	Beaufort	Surry	
	Greene	Pitt	Cabarrus	
	Duplin	Person	Craven	
	Mount Airy City	Caldwell	Clinton	
	Tyrrell	Granville	Transylvania	
	Jones	Kings Mountain City	New Hanover	
	Perquimans	Onslow	Moore	
	Iredell-Statesville	Lee	Alleghany	
	Durham	Hickory City	Stanly	
		Alamance-Burlington	Swain	
		Columbus	Camden	
		Harnett	Chapel Hill/Carrbo	m City
		Carteret	Davidson	io Chy
		Sampson	Clay	
		Asheville City	Polk	
		Alexander	Yadkin ·	
		Burke	Buncombe	
		Montgomery	Pamlico	
		Catawba	Davie Davie	
		Guilford	Cherokee	
		Asheboro City	CHEIOREE	
		Whiteville City		
		Union		
		Ashe		
		Asiic		

^{*}These data represent the highest test score of each student for all the test administrations in which the student participated.





Sample Questions for the North Carolina Tests of Computer Skills





V. Sample Test Questions

North Carolina Tests of Computer Skills

Multiple-Choice Test This test consists of 70 questions that ask you about the use of computers in society, hardware and software components, keyboarding, and how to use specific software applications—word processing, database, spreadsheet, and telecomputing.

Directions: To answer a question, first decide which is the **best** answer choice for a particular question. Then, find the question number on your answer grid (below) and make a mark in the circle containing the letter of the correct answer. Remember to mark only one answer for each question.

1 A B © D

2 (A) (B) (C) (D)

3 A B C O

4 (A) (B) (C) (D)

5 A B © D

6 A B C D

7 A B C O

8 (A) (B) (C) (D)

9 A B C D

Performance Test This test consists of four parts—Keyboarding Techniques, Word Processing/ Editing, Database Use, and Spreadsheet Use—that assess how well you can use specific software applications.

Directions: Read the directions at the beginning of each part. Then complete the task or questions. For the Keyboarding Techniques and Word Processing/Editing parts you must print out your work. For the Database Use and Spreadsheet Use parts you should mark your answers in the space provided next to each question.



Multiple-Choice Test

- 1. Doing research by using an on-line database instead of a printed set of similar information offers which advantage?
 - A more current information
 - B better charts
 - C easier to understand tables
 - D more legible diagrams
- 2. Upon walking into Mr. Johnson's workroom, Daryl saw a test for tomorrow on the computer screen. Which of the following can Daryl ethically do?
 - A Correct obvious errors on the test to help Mr. Johnson avoid embarrassment.
 - B Read the questions as a study guide.
 - C Add a few well-chosen questions that Mr. Johnson left out.
 - D Leave the room without reading the test questions.

- 3. What is the function of a disk drive?
 - A to print sheets of paper
 - B to read from or write information to a floppy disk
 - C to display information or pictures on a screen
 - D to calculate numbers
- 4. For a social studies report, Fred needs to illustrate the products of North Carolina with pictures and comparison graphs. He would **most likely** use which software programs?
 - A spreadsheet and statistical
 - B spreadsheet and database
 - C graphing and clip art
 - D clip art and drawing
- 5. For correct keyboarding, what is the recommended placement of fingers on the home row keys?
 - A fingers of the left hand on A-S-D-F and fingers on the right hand on J-K-L-;
 - B fingers of the right hand on A-S-D-F and fingers on the left hand on J-K-L-;
 - C fingers of the left hand on A-S-E-F and fingers on the right hand on J-K-O-P
 - D fingers of the left hand on Q-W-E-R and fingers on the right hand on U-I-O-P



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- 6. Jim is typing a song on his word processor. The song has four verses, and the chorus is repeated after each verse. What would be the *most* efficient way to enter the song, making sure the chorus is repeated after each verse?
 - A type the chorus four times
 - B copy the chorus on a copy machine and then cut and paste it into his document
 - C use the Copy Command on his word processor
 - D highlight the text and change it to **Bold**
- 7. Which is **not** an advantage of using computerized spreadsheets?
 - A speed of calculation
 - B flexibility of moving entries
 - C cost of initial set-up
 - D ability to generate tables

- 8. Bob Smith plans to run for governor of North Carolina. One part of his platform deals with increasing medical services to rural areas. Which of the following will **best** help determine where money should be spent to open clinics?
 - A Search a NC database for type of community = "rural" and then Sort on the field showing the number of doctors.
 - B Sort a NC database on the type of community and then Search number of doctors < = 5.
 - C Search a NC database for type of community = "rural" and then Search number of doctors < = 5.
 - D Sort a NC database on the type of community and then Sort on the field showing the number of doctors.
- 9. Using an electronic bulletin board, Andy can do all of the following *except* which one?
 - A send private messages to a friend
 - B send a public message to friends interested in one topic
 - C send pictures to a friend
 - D send a package to a friend



Performance Test

Part I: Keyboarding Techniques

Directions:

- 1. Key as accurately as possible the paragraphs below. Remember to use correct keyboarding techniques. Note: Do not worry about any differences in word wrap between what you type and how the paragraphs appear on this page.
- 2. When you have finished keying the paragraphs, print your work.

USING DATABASES IN THE SOCIAL STUDIES CLASS

In our eighth grade social studies class we are using computers with a database program. When we need information on a country, we look up the name of the country on an atlas program. We have six different diskettes.

Yesterday, we were doing a project on the United States of America. One of our assignments was to find the following:

North Carolina

Utah

New Mexico

Vermont

Florida

Texas.



Performance Test

Part II: Word Processing/Editing

Directions:

- Edit the paragraph below. You may use the "Edit Symbol Reference 1. Table" provided below if you need assistance.
- 2. When you have finished editing the paragraph, print your work.

Edit Symbol Reference Table

=	capitalize	JC	center
اد	lower case	口	indent
عر	delete	^	insert
_	replace word	ð	move
#	insert space	O	spell out
97	new paragraph		

\beth using databases for social studies \Box

grade In our eighth social studies class we are using computers with a database program. When we need information on a country, we look up thename of the country on an atlas program. We have six different diskettes.

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<u> 30</u>

Performance Test Part III: Database Use

Directions: Use your database program and the file called PLANETS.

- 1. Read the scenario.
- 2. Use the database file to respond to the questions below.
- 3. When asked to "describe the steps you took to find your answer," use appropriate database terms. For example, "Sorted the Number of Moons field in descending order" or "Searched the Number of Moons field for all records greater than 2."

Scenario:

Planet:

Your eighth grade science classes have entered a contest to build a new solar system. Before you start making planets for the solar system in your class, you must gather data on each planet. Use the database PLANETS to find the data you need.

Earth

Sample Record from PLANETS Database.

Prob Temp (F):	72
Number of Moons:	1
Length of Year:	365.3
Gravity at Surf:	1
Dist from Sun:	93,000,000
Atmosphere: nitr	ogen, oxygen, carbon dioxide,
wate	r vapor
2.	Which planet, with surface gravity (Gravity at Surf) of at least 1.10, has the most moons?
	planation: Use database terms to describe the steps you to find your answer.



Performance Test

Part IV: Spreadsheet Use

Directions: Use your spreadsheet program and the file called NUTRIENTS.

- 1. Read the scenario.
- 2. Use the spreadsheet file to respond to the questions below.

Scenario:

The school cafeteria staff is letting your class plan the meals for a week. You can serve pizza, but you also must serve one plate of "regular" food. Use the spreadsheet NUTRIENTS to help plan the meals.

Excerpt from NUTRIENTS Spreadsheet.

Item	Qty.	Protein	Vitamin C	Calcium	Iron
*************************************	Servings	(grams)	(mg)	(mg)	(mg)
Chicken Drumstick	0_	0	0	0	0
Hamburger Patty	0	0	0	0	0
Fresh Spinach	0	0	0	0	0
Baked Potato	0	0	0	0	0
Fresh Corn	0	0	0	0	0
Cooked Fresh Carrots	0	0	0	0	0
Raw Cabbage	0	0	0	0	0
Banana	0	0	0	0	0
Apple	0	0	0	0	0
Total Nutrients:		0	0	0	0

 1.	How many milligrams (mg) of Iron are in 2 Bananas and 4 servings of Fresh Spinach?

2. How many servings of Cooked Fresh Carrots will give the same amount of calcium as 24 servings of Apples?



Answers to Sample Tests and Notes

Multiple-Choice Test

- 1. The correct answer is A. This question measures how well you understand how computers are used as a tool for accessing information.
- 2. The correct answer is D. This question measures how well you understand the ethical use of computers and respect the computer-generated work of others.
- 3. The correct answer is B. This question measures your understanding of the components of a computer—hardware and software. You may also be asked about other physical components of a computer, their function, and use.
- 4. The correct answer is C. This question measures your knowledge of the use of software in various subjects to solve problems. You may also be asked about other types of software, e.g., probeware used in science, database programs in social studies.
- 5. The correct answer is A. This question measures your knowledge of correct keyboarding skills and finger placement on the home row keys.
- 6. The correct answer is C. This question measures you ability to use the Copy and Paste functions while word processing. You may also be asked about other functions (e.g., Move, Print) and utilities (e.g., spell checker, grammar checker), and about producing desktop published documents.
- 7. The correct answer is C. This question measures your understanding of the advantages (or disadvantages) of using a computerized spreadsheet versus a printed spreadsheet. You may also be asked to use a spreadsheet to test simple "What if?" statements.

- 8. The correct answer is A. This question measures your ability to use sorting and searching techniques to solve a problem while using a database program.
- 9. The correct answer is D. This question measures your understanding of how an electronic bulletin board works.

Performance Test

Part I: Keyboarding Techniques. This task is scored for typing accuracy, spacing, and length.

Part II: Word Processing/Editing. This task is scored for the number of correct edits and if other errors are made while editing.

Part III: Database Use.

- 1. The correct answer is "Pluto." This question measures your ability to Sort a database.
- 2. The correct answer is "Saturn." Your answer is also scored for how well you explain how you determined your answer to the question ("I searched the field Gravity at Surf > or = 1.10 and then sorted the records on the field Number of Moons in descending order.") This question measures your ability to use searching and sorting techniques to solve a problem.

Part IV: Spreadsheet Use.

- 1. The correct answer is 6.8. This question measures your ability to use a spreadsheet to test simple "What if?" statements.
- 2. The correct answer is 5. This question also measures your ability to use a spreadsheet to test simple "What if?" statements.



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Student Performance by LEA and Region

(Six Former Technical Assistance Centers Configurations)

1996-97 Report of Student Performance*
North Carolina Test of Computer Skills (Multiple-Choice and Performance)
Percent Passing, Western Region

z																-				i anno				
	Number Ni	Number Pe	Percent N	Number N	Number	Percent	Number P	Number	Percent !	Number P	Number	Percent ?	Number N	Number	Percent A	Number N	Number F	Percent N	Number	Number P	Percent N	Number No	Number P	Percent
•	Tested Pr	Passing Pe	Passing	Tested P	Passing	Passing	Tested	Passing	Passing	Tested	Passing	Passing	Tested	Passing	Passing	Tested	Passing F	Passing	Tested	Passing P	Passing T	Tested Pa	Passing P	Passing
	89,217	1 569'99	74.8%	1,573	954	%9.09	957	781	81.6%	25,547	14,054	55.0%	1,558	988	86.9%	1,052	787	74.8%	465	328 7	70.5%	57,421 4	48,491 8	84.4%
	7,095	5,834 82	82.2%	84	26	66.7%	33	27	81.8%	472	308	65.3%	72	45	62.5%	63	51 8	81.0%	4	32 7	78.0%	6.314	5,304 8	84.0%
Durantha Chimer	1 002		07.40	: :		, VO VO	¥	: Z	07 50	, ,		00 40) 1	4	73.30	۶		8			800	277		
noc county	S	o 0/01	%	2 - 	.	Š.	2	3	9(.7%	ò	. 54.	58,3%	Ç		75,5%	₹.	2	92,0%	≥	×	80.0%	<u>3</u>	8 06.4.1	87.5%
Asheville City	319	250 78	78.4%	7		ei ∳j¢			*	123	82	65.6%	10	•	%0.09	4	·• .]	ν _η δ. ••*	7	•		175	155 8	88.6%
Cherokee County	274	246 89	89.8%	m	3 .* *	•		2. 2.		7						<u>ं</u> इ.स.	**	: .	•		•	262	238 9	90.8%
Clay County	112	97 86	89.98	3	•	•	•	•		•	•	•	•	•	•	•	•		2	•	•	105	93 8	88.6%
Graham County	83	79 95	95.2%	10	2	100.0%	•	•	•	•	•	•	•	•	•	•	•	•	-	•		7.1	6 19	94.4%
Haywood County	551	444 80	89.08	3	•		•	•	•	•	Б.	50.0%	ν,	4	80.0%	en ,	•	•	4	•	•	529	430 8	81.3%
Henderson County	852	700 82	82.2%	7	. *		•	, v	83.3%	88	22	37.3%	22	6	40.9%	۵	•	6.7%	∞	5	62.5%	746	653 8	87.5%
Jackson County	287	234 81	81.5%	71	12	\$1.1%	_	•	•	. es	•	; ;	. *	•		С	٠.				•	258	209	81.0%
Macon County	296	246 83	83.1%	•,	*	**************************************			: di	Þ			77.6° 27.6° 2.7.6°	Light Tigg			•	*		•	*	287	241 8	84.0%
Madison County	204	152 74	74.5%	-	•		•	•	•	2	•		-	•		æ	•	•	•	•	•	961	148 7	75.5%
McDowell County	553	357 64	64.6%	-	•	•	7	4	57.1%	56	13 \$	\$0.0%	-	•	•	9	9	100.0%	3	•	•	809	332 6	65.2%
Mitchell County	161	141 73	73.8%	- .	•	• !	• !	•		•	•	• :	•	•	•	7	•		w ;	•	•	185	136 7	73.5%
Polk County	171	149 87	87.1%	-	•		is Le gipsi			9	=	28.89	~~	•				*	~	* 1 • 1 •		150	137 9	91.3%
Rutherford County 800	. 2008	644 80.5%	.5%	<u>.</u>						118	75 6	63.6%	∞	7	20.0%	4	(C)	 	-4	- 122 - 144 - 144		2	558 8	84.0%
Swain County	128	110 85	85,9%	77	17 8	81.0%		•			•			ġ. * .		•	·			•		103	8	88.2%
Transylvania County	308	259 84	84.1%	2	•	•	*	•	•	20	14 7	70.0%	-	•	•	4	•	•	2	•		276	236 8:	85.5%
Yancey County	163	150 92	92.0%	*	•		•	•		4	•	•	_	٠		•	•		-	•		151	941	02 4%

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Notes: *Data were deleted where number tested was less than five.

Total category includes all students who participated. Ethnic categories include only students identified in those categories

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North Carolina Test of Computer Skills (Multiple-Choice and Performance) 1996-97 Report of Student Performance* Percent Passing, Northwest Region

•		Total'		Апе	American Indian	c		Asian		18	Black		Hispanic	ບ	Z	Multi-Racial		•	Other		=	White	
	Number	Number	Percent	Number	Number	Percent !	Number P	Number		Number Num	Number Perc	Percent Number	er Number	r Percent	Number	Number	Percent 1	Number N	Number Pe	Percent Nu	Number Nu	Number P	Percent
	Tested	Passing	Passing	Tested	Passing	Passing	Tested	Passing	Passing T	Tested Pas	Passing Pass	Passing Tested	d Passing	Passing	Tested	Passing	Passing	Tested P.	Passing Pa	Passing Te	Tested Pa	Passing P.	Passing
900	60 217	¥6.40¢	74 90%	. 673	956	707 (2)	250	9								ţ		}					
SIRIC	117,00			C/C'1		9/.0.00	100		ø.0:	1 / 1 / 1 / 1	14,034 33.0%		988 866,1	0 20.9%	750'1	/8/	74.8%	465	328	70.5% 5	57,421 4	48,491 8	84.4%
Region	13,777	9,344	%8.79	4	7	48.8%	234	173	73.9%	1,964	1,050 53.5%	5% 2	120	0 47.8%	811	82	69.5%	41	29 7	10.7%	960'11	9,233 8	83.2%
Alexander County	369	290	78.6%				1	•	71.4%	6	11 57.	9%	·	* 37 * 1 * 1	4			7	্ জ —	50.0%	332	267 8	80.4%
Alleghany County	=======================================	8	96 85.0%	** 	*	•							ं १ .				.*• .*.		***	 	108	. 6	85,2%
Ashe County	267	213	213 79.8%	- %	** 81 7		*	* *		. .				oniaj Ser Naj			jusé A.∎ Van		ina tu Int 🔸	;; ; ./ į .*.	265		79.6%
Avery County	178	126	70.8%	•	•	•	•	•	•	2	•		2		-	•		•	•	. •	171	121	70.8%
Burke County	1,019	802	78.7%	4	•	•	8	62	76.5%	11	44 62.0%	%(12	6 50.0%	13	0.	76.9%	•	•	•	833	674 81	80.9%
Caldwell County	889	11.9	75.5%	\$	2	33.3%	-	•	•	19	31 50.8%	%}	9	2 33.3%	8	9	75.0%	•	•	•	108	623 7	77.8%
Catawba County	1,126		891 79.1%	Š	e,	£0.0%	45	28 (2.2%	8	41 62.1%	8	22 L	12 54.5%	13	2	92.3%		*		971	791 8	81.5%
Hickory City	339	260	260 76.7%	***	•		-19	13 68	8.4%	84	38 45.2%	%;	. OI	4 40.0%	-			: : : :			222	8 861	89.2%
Newton-Conover	217	179	217 % 179 82.5%	200			10	6	\$0.0%	39	26 66.7%	%	9	5 83.3%	. -	* * · · · · · · · · · · · · · · · · · ·					158	136 86	86.1%
Davidson County	1,380	1,188	86.1%	١,	4	57.1%	5	5	100.0%	30	17 56.7%	%1	14 1.	78.6%	'n	4	80.0%	-	•	•	,317	1,145 86	86.9%
Lexington City	226	131	28.0%		•	•	15	10	%1.99	95	43 45.3%	%:	50	3 37.5%	8	2	40.0%	*	•		101	71 70	70.3%
Thomasville City	133	83	62.4%	• :	•	•	• :	* .	*	19	26 42.6%	%	S	2 40.0%	ю	• .	•	• •	•		4	53 82	82.8%
Davie County	388	2 4	88.7%	*	*) is •	-	*	***	33	29 87.9%	8	- 10° × 10°	***************************************	S	'n	100.0%	, ^, m , ', ',	•	•	342		88.6%
Forsyth County	7,6	1,843	70.5%	7	e.	42.9%	25	19	6.0%	934	476 51.0%	88	.1 95	7 30.4%	26	2	46.2%	ं २ ं २ के स	9	1 %0'09	1 48.	1,304	84.5%
Iredell-Statesville	1242	860 69.2%	69.2%	₹			=	9 8	1.8%	260	128 49.2%	88	; (6)	5 26.3%	. 00	4	50.0%	•	3	£0.0%	932	710 76	76.2%
Mooresville City	247	200	81.0%	•	•	•	9	9 100	%0.00	55	32 58.2%	%		•	-	•	•	•	•		182	160 87	87.9%
Stokes County	552	445	80.6%	2	*		-	•	•	28	21 75.0%	%	5 3	%0.09	4	•	*	-	•	*	511	415 81	81.2%
Surry County	654	545	545 83.3%	-	•	*		• * *	* }	34	23 67.6%	8	96 14	53.8%	£	*	: : • :	-	•		288	513 87	87.2%
Elkin City	68	Ž .	86 96.6%		5 (3 8**) 3×45,					***** ********************************				Seguida *		***		on ti T∗ vegi	*	*		82 . 96	96.5%
Mount Airy City	134		134 91 67.9%	• • • •		•	- :	•		18	5 27.8%	& E					* * * * * * * * * * * * * * * * * * *						73.5%
Wilkes County	789	652	82.6%			•		3 6	60.0%	44	29 65.9%		15 7	46.7%	·	. 4	80.0%	4 -	•	•	7.16	607	84.8%
Yadkin County	421		87.2%	•	•	•	•	•	•	70	19 95.0%		32 20		4	•	•	-	•		362		89.8%
Notes: *Data were deleted where number tested was less than five.	d where nur	nber tested w	as less than	five.			: !) 1
Total caregory includes all students who parterpated. Ethnic calegones include only students identified in those calegory	cludes all st	ndents who	запсіраїед.	Ethnic calego	nes include	only studen.	s identified i	n those cate,	gories													` }	Ó,

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1996-97 Report of Student Performance* North Carolina Test of Computer Skills (Multiple-Choice and Performance) Percent Passing, Southwest Region

		Total ¹		Ame	American Indian	u		Asian			Black		His	Ilspanic		Multi-Racial	tacial		Other			White	
	Number	Number	Percent	Number	Number	Percent	Number	Number	Percent !	Number N	Number	Percent N	Number Nu	Number Pe	Percent Number	ber Number	ber Percent	nt Number	Number	Percent	Number	Number	Percent
	Tested	Passing	Passing	Tested	Passing	Passing	Tested	Passing	Passing	Tested	Passing	Passing	Tested Pas	Passing Pa	Passing Tested	led Passing	ing Passing	ng Tested	Passing	Passing	Tested	Passing	Passing
State	89,217	66,695 74.8%	74.8%	1,573	954	%9.09	957	181	81.6%	25,547	14,054	55.0%	1,558	986 56	56.9% 1,	,052	787 74.8%	% 465	5 328	8 70.5%	57,421	48,491	84.4%
Region	19,069	13,863	72.7%	211	106	50.2%	107	92	86.0%	5,766	2,905	50.4%	198	92 46	46.5%	001	76 76.0%	%	7 32	2 68.1%	12,205	10,268	84.1%
County	311 194	194	62.4%				2	•		189	95	50.3%					*			*	8	8	81.4%
Cabarrus Counity	1,281	1,068	1,068 83.4%	CO.	œ	100.0%	. 	•	87.5%	146	2	51.4%		∞ - 3	4%	9	9.06	88	×	5 100.0%	1,084	956	88.2%
Kannapolls City	322	198	60.2%	: 	* *	*	m	÷.		≥	\$	\$1.9%		् <u>ष्ट</u> 	16.7%	e i e			7	•	201	132	65.7%
Cleveland County	<i>LL</i> 19	494	73.0%	2	•	•	-	*	•	141	79	\$6.0%	9	3 50	50.0%	6	•		_	•	522	405	77.6%
Kings Mountain	215	163	75.8%	-	•	*	9	•	•	62	38	61.3%	2	•		9	5 83.3%	1%	_	•	139	117	84.2%
Shelby City	225	225 163	72.4%	* ***	•	•		•	* :	117	19	52.1%	•	•		2	•		~	•	101	96	95.0%
Caston County	2,242	1,640	1,640 73.1% 14 9 64.3%	4	6	64.3%	27	24	88.9%	426	061	44.6%		10 SS	%9	15	12 80.0%	**************************************		5 71.4%	1,735	1,384	79.8%
Hoke County	461	236	51.2%	51.2% 66		15 22.7%	7			228	101	44.3%	2	9	60.0%	10	8 80.0%	76			141	103	73.0%
Lincoln County-	786	1.3	645 82.1%	1	4	4 57.1%	4			89	43	63.2%	29	.E	% %	evi Se	5 71.4%	1 0		:	999	574	86.3%
Mecklenburg County	6,654	4,494	4,494 67.5%	21	12	57.1%	•	•		2,786	1,293	46.4%	•	•		2	2 40.0%	%		•	3,432	2,899	84.5%
Montgomery County	, 333	262	78.7%	-	•	•	7	7	100.0%	<u>10</u>	. 21	71.3%	20	8 40	40.0%	_	•			•	203	174	85.7%
Moore County	168	652	84.9%	9	٠.	83.3%	3	• :	•	161	132	%1.69	61	12 63	63.2%	: •	6 100.0%	%		•	540	492	91.1%
Richmond County	675	415	61.5%	70	9	10 50.0%	-	7	100.0%	296	¥.	48.6%	~	5 71	71.4%	ر د د	•		_	•	336	247	73.5%
Rowan County	1,435	1,154	80.4%	4	*	*	3	2	71.4%	289	171	59.2%	7	12 85	85.7%	9	5 83.39	, se	₹ 1	57.1%	1,096	946	86.3%
Scotland County	521	324	521 324 62.2% 5 50 50			30 60.0%				238	130	54.6%		***			*			•	223	157	70.4%
Stanly County	737	629	85.3%	4	•	•	11	13	76.5%	126	88	69.8%	13	5 41.	41.7%	6	•	_	•	•	573	518	90.4%
Union County	1,426	1,136	79.7%	\$	4	80.0%	\$	\$	%0:001	258	139	53.9%	35	7 20.	20.0%	15	10 66.7%	<i>x</i>	5	62.5%	1,089	965	88.6%

Notes: *Data were deleted where number tested was less than five.

¹Total category includes all students who participated. Ethnic categories include only students identified in thuse categories

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1996-97 Report of Student Performance*
North Carolina Test of Computer Skills (Multiple-Choice and Performance)
Percent Passing, Northeast Region

		Total'		Ame	American Indian	5		Asian			Black		IIIs	Hispanic		Multi-Racial	lacial		Other			White	
•	Number					Percent		Number		<u>ا</u> ا			L	. '	_	_		_			Number	Number	Percent
	Tested	Passing	Passing	Tested	Passing	Passing	Tested	Passing	Passing	Tested	Passing	Passing	Tested Par	Pacsing Pa	Passing Tested	ed Passing	ing Passing	ng Tested	d Passing	Passing	Tested	Passing	Passing
State	89,217	. 569'99	74.8%	1,573	954	%9'09	156	781	81.6%	25,547	14,054	\$5.0%	1,558	886 56	56.9% 1,	1,052	787 74.8%		465 33	328 70.5%	57,421	48,491	84.4%
Region	6,610	4,379	66.2%	. 58	33	26.9%	36	32	88.9%	3,388	1,766	52.1%	49	30 61	61.2%		39 76.5%	%	38	27 71.1%	2,965	2,437	82.2%
Beaufort County	513.		384 74,9%							207	121	58.5%		ing L <mark>*</mark> ng	25 181 181	, , ,	4 80.0%	8 2	, <u>, , , , , , , , , , , , , , , , , , </u>	5 71.4%	282	243	86.2%
Bertie County	336		219 65.2%	3.4. 3.4.	***	in in				279	891	60.6%	-			•	1. * 1. * 1 2. * 1 2. * 1			•	48	.	89.6%
Canden County	74	86.0%						•	2	<u>=</u>	82.4%	•	•		_	* . ::			•	19	38	86.6%
Chowan County	181	134 74.0%	74.0%	•	*	*	•	•	•	95	99 (62.1%	•	*		ы	•		*		82	73	89.0%
Currituck County	262	172	65.6%	2	•	•	2	*	*	24	=	45.8%	2	•		2	•		7		226	155	89.89
Dare County	348	322	92.5%	:	• :	•	2	•	*	82	91	88.9%	, v,	5 100	00.00	, • .	• .		_	•	321	298	92.8%
Edgecombe County	569	370	370 65.0%	a. Zn.		64y -				329	176	53.5%	•	.8	78 8		*		- d 2- ± ••, •		232	188	81.0%
Gates County	149	110	73.8%	***	*		•			75	47	62.7%							 -	•	17	35	84.5%
Halifax County	498	214	43.0%	39	20	51.3%	-	•	•	418	70.	40.7%		*			4 57.1%	3F	.—	. •	3.	18	58.1%
Roanoke Rapids	237	168	70.9%	3	•	•	7	7	%0.001	4	22	53.7%	7	•	٠		•			*	179	133	74.3%
Weldon City	83	19	22.9%	•	•	•	•	*		72	91	22.2%	*	*			•		2		∞	2	25.0%
Henford County	333	153	45.9%	-	•	•	•	•	•	246	98	35.0%		* .	:	₹ (* 1		4	* ;	11	. 59	76.6%
Hyde County	82	87	48 61,5%	•	•		•	3 * 4.		32	2	46.9%	li Wariya Bariya	*						• . •	45	32	71.1%
Martin County	400	295 73.8%	3.8%	7	•	- 1 • 1	•		gant. Serie S e tt	219	140 63.9%	3.9%	7				•		m	# ser	173	151	87.3%
Northampton County	314		209 66.6%	<u></u>		# 3 ₩				251	191	64.1%							: -	•	88	4	79.7%
Pasquotank County	448	203 4	45.3%	•	•		2	•	•	214	62 2	29.0%	5	3 60.	%0.09	2	•		2		219	133	60.7%
Perquimans County	6	62 6	%6.89	•	•	•	•	•	•	42	18 4	42.9%	•	•	_		•			•	47	43	91.5%
Pitt County	1,433	1,074	74.9%	v .	4	80.08	. 17	91	94.1%	655	389 5	59.4%	92	9 56.	56.3%	13	10 76.9%	2	12 , 1	0 83.3%	715	969	89.0%
Tyrrell County	S	36	67.9%		•	*,		***		26	9	61.5%	•	**************************************						•	25	61	76.0%
Washington County	- 661	99° 113 56.8%	6.8%	•	*****					128	58 45.3%	5.3%	3	•		£	* E		_	•	28.	46	79.3%

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Notes: *Data were deleted where number tested was less than five.

Total category includes all students who participated. Ethnic categories include only students identified in those categories

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North Carolina Test of Computer Skills (Multiple-Choice and Performance) Percent Passing, Southeast Region 1996-97 Report of Student Performance*

																				-			
	Number	Number	Percent	Number Number		Percent Ni	Number No	Number Per	cent	Number Nu	Number P	Percent N	Number N	Number Pe	Percent Nu	Number Nu	Number Pe	Percent Nu	Number N	Number Pe	Percent Nu	Number Nu	Number Percent
	Tested	Passing	Passing	Tested Passing		Passing T	Tested Ps	Passing Pas	sing	Tested Pa	Passing P	Passing T	Tested Pa	Passing Pa	Passing T	Tested Pa	Passing Pa	Pacsing To	Tested Pa	Passing Pr	Passing Te	Tested Pa	Passing Passing
Stale	89,217		66,695 74.8%	1,573	954 60.6%	%9:09	957	781 81.	%9	25,547	14,054 \$	55.0%	1,558	98 988	26.9%	1,052	787 74	74.8%	465	328 70	70.5% 5	57,421 4	48,491 84.4%
Region	17.005	12.245	72.0%	1.033	650	62.9%	140	116 82	% 6	5.884	3.346 5	26.9%	460	315 68	68.5%	375	769 71	71.7%	130	7. 70	70.8%	8 940	7411 82 9%
		100	1					500		Seg.	200			42	64. 2400 1460		^ 2		}				
Bladen County	438	8	238 54.3%	S	m	60.0%				212	63 2	29.7%	7						-	•	• .	217	168 77.4%
Brunswick County	779	571	73.3%	571 73.3% 12	1	58.3%	r4			193	9 811	61.1 <i>8</i>		7	63.6%		\$	4%	7	v a.• ä		553	432 78.1%
Carteret County	\$69	S3.	551 79.3%	\$		60.0%	174			92	9 94	60.5%	•	* ≦ * ► . ·	20,00		.9	78	2	æ ∞	80.0%	584	477 81.7%
Columbus County	523	403	403 77.1%	38	3	81.6%	•	•		211	146 6	69.2%	•	•	•	-	•		-	•	•	569	222 82.5%
Whiteville City	204	162	162 79.4%	3	•	•	•	•	•	82	9 65	69.4%	•	•	•	-	•	•	•	•		115	101 87.8%
Craven County	1,103	921	83.5%	9	4	92.1%	6	99 9	3.7%	373	250 6	%0.79	23	18 78	78.3%	61	14 73	73.7%	∞	7 8.	87.5%	664	598 90.1%
Cumberfand County	3,658	2,473	. 69.19	₩ 6 <i>L</i>	3,658 2,473 67.6% 79 46 58.2%	\$8.2%	53	46 86.	₽8.9	1573	850 \$	54.0%	184	138 75	75.0%	3	106	75.7%	96 33	29 74	74.4%	1,585	1,254 79.1%
Duplin County	582	395	395 67.9%	i.	* 1		•			224	117 S	52.2%	8	10 35	35.7%		7°6	•		•	•	328	268 81.7%
Greene County	236	<u>s</u>	160 67.8%	•	•	•	* : * : * :			129	76 5	58.9%	6	4	44.4%	2	· · · · · · · · · · · · · · · · · · ·	:•				94	79 84.0%
Jones County	138	95	68.8%	-	•	•	•	•	•	65	40 6	61.5%	•	•	•	-	•		•	•	•	11	54 76.1%
Lenoir County	191	491	491 64.5%	er.	•	•	e	•		376	197 S	52.4%	9	•		∞	6 75	75.0%	3	•	•	360	279 77.5%
New Hanover County	1,508	1,273	84.4%	<u>s</u>	13.	100.0%	12	8 66	.7%	386	254 6	65.8%	= ;	06 01	%6'06	4	13 92	95.9%	4	12 85	85.7%	,055	%1'16 196
Onslow County	1,756	1,334	1,334 76.0%	. = .		11 78.6%	#	29 93.	5%	389	215 5	55.3%	9/	49 64.5%	.5%	83	57 69	69.5%	28	19 61	67.9%	.131	951 84.1%
Pamlico County	1691	148	. 148 87.6%	1						711	* 9	84.5%				7	*** ** **** ****			*		94	85 90.4%
Pender County	463 276 39.6% 2 50 6 50 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	276	. 29.6%		₩ ₩ ¥		7			14)	20.	42.2%	. eo	6 75	75.0%	· .		· :	₩.	•	•	297	204 68.7%
Robeson County	1,852	1,152	1,152 62.2%	836	511 61.1%	1.1%	6	88 88.	%6:	511	270 53	52.8%	22	14 63.	63.6%	40	19 47	47.5%	7	5 71	71.4%	416	323 77.6%
Sampson County	898	44.	444 78.2%	7	8	85.7%	•	•	•	221	153 69	69.2%	32	19 59.	59.4%	13	8 61	%5.19	٣	•	•	292	255 87.3%
Clinton City	176	148	148 84.1%	œ	7 8	7 87.5%	-	•		8	65 77	77.4%	5	4 80.	80.0%	3	•	•	•	•	•	7.5	68 90.7%
(20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	*			10 10 10					Service Services					1.20		•			٠.		

Notes: "Data were deleted where number rested was less than five.

Tratal category includes all students who participated. Ethnic categories include only students identified in those categories.

North Carolina Test of Computer Skills (Multiple-Choice and Performance) 1996-97 Report of Student Performance* Percent Passing, Central Region

		Total'		Ате	American Indian	c	*	Asian		蕃	Black		His	Hispanic		Mulli-Racial	icial		Other			White	
	Number	Number	Percent	Number	Number	Percent N	Number Nu	Number Pe	Percent Nur	Number Nur	Number Pe	Percent Nun	Number Num		Percent Number	ber Number	er Percent	Number	Number	Percent	L	-	Percent
	Tested	Passing	Passing	Tested	Passing	Passing	Tested Pa	Passing Pa	Passing Te	Tested Pas	Passing Pa	Passing Tes	Tested Pas	Passing Pas	Passing Tested	ed Passing	g Passing	Tested	Passing	Passing	Tested	Passing Pa	Passing
State	89,217	66,695	74.8%	1,573	954	%9:09	957	781 81	81.6% 2.	25,547 14	14,054 55	55.0%	,558	886 56.	56.9% 1,(1,052	787 74.8%	465	328	70.5%	57,421	48,491 84	84.4%
Region	25,661	19,649	76.6%	144	88	61.1%	407	341 83	83.8%	8,073	4,679 58	58.0%	528	284 53.	53.8%	345 2.	270 78.3%	891	911	%0.69	15,901	13,838 87	87.0%
Alamance County	1,322		1,017 76.9%	(1) (1) (m) (1)		ar∎.	2	10 83	83.3%	277	,80 ,10	63.9%	38	19 54	54.3%		8 72.7%		*	71.4%	696	791 8	81.6%
Caswell County			72.4%			Sii (ili) Lua≨a Luass				135	83 61	61.5%				'n				, v	091	116 87	82.9%
Chatham County	461		378 82.0%								72.64	64.9%		.09		***		 	•		331	293 88	88.5%
Durham County	1,987		1,376 69.3%	1	4	57.1%	32	31 96	%6.9%	010'1	555 55	55.0%	39	25 64.	64.1%	35	30 85.7%	=	•	72.7%	831	718 86	86.4%
Franklin County	858	342	%£"19	7	æ.	42.9%	•	•		22.5	103 45	45.8%	_	•		6	89.88	4	•	•	309	230 74	74.4%
Granville County	543	411	75.7%	e	•	•	2	*	•	504	95 911	26.9%	e .	• ;	;	7	4 57.1%	m	•	•	321	286 89	89.1%
Guilford County ***	. :	3,362	79.2%	4,243 3,362 79.2% 29	2	44.8%	127	95 74	74.8%	1,498	965 8	64.4%	53	35 63.	63.6%	3. 3.	45 72.6%	29	28	62.1%	2,439	2,191 89	88.68
Harred County	1,026	197	77.1%	1,026 791 77.1% 15	_	73.3%			85.7%	290	179 61	61.7%	8	13 50	50.0%	23	25 86.2%		4	80.0%	654	553 84	84.6%
	1,259	1.016	80.79	9	٥	90.0%				256	३	64.8%		22 51.	51.2%	\$	\$ 62.5%	=	4	36.4%	930	809 87	87.0%
Lee County	663	208	76.6%	2	•	•	٠,	3 60	%0.09	161	122 63	63.9%	62	25 40.	40.3%	6	•	*	•	•	397	351 88	88.4%
Nash/Rocky Mount	1,281	802	62.8%	\$	3	%0.09	=	7 63	63.6%	646	287 44	44.4%	19	10 52.0	\$2.6%	œ	5 62.5%	6	4	44.4%	613	487 84	84.1%
Orange County	427	351	82.2%	• '	•	•	-	•		96	89 99	68.8%	9	4 66.7%	1%	4	•		• .	•	317	274 86	86.4%
Chapel Hill City	989	280	86.0%				. 29	28 96	96.6%	113		54.0%	15	8 53	53.3%	***	21 87.5%		7	77.8%	486	459 94	94.4%
Person County	204	348	75.0%	.	₹	80.0%	•			163	111	68.1%	=	5 45.	45.5%	. 4			•	•	276	227 82	82.2%
Randolph County	1,153	952	82.6%	\$	е.	37.5%		5	100.0%	. 29	43 72	72.9%	23	11 47.8%	3 5	 m	•	-		•	1,050	886 84	84.4%
Asheboro City	261	207	79.3%	2	*	*	-	•		52	32 61	61.5%	91	10 62.5%	2%	3	•	9	4	%1.99	181	156 86	86.2%
Rockingham County	y 1,009	753	74.6%	7	9	85.7%	9	6 100	%0.00	235	148 63	63.0%	15	6 40.0%	% 0	10	7 70.0%	2	•	•	734	578 78	78.7%
Vance County	501	241	48.1%	2	*	*	2	•	•	297	110 37	37.0%	3			4	•	_	•	•	191	125 65	65.4%
Wake County	6,330	5,191	5,191 82.0%	8 1	2	72.2%	163	143 87	87.7%	1,561	923 59	59.1%	911	74 63.8%	3 ² C		91: 82.0%	28	44	84.5%	4,283	3,887 90	8.06
, Warren County	301	4	144 47.8%	. 3	် က် (နေ့ -	35.7%	• • • • • • • • • • • • • • • • • • • •	•		82	97.47	47.3%	v	%0°0 0	8 8	() ()	*		•	•	1.0	39 63	63.9%
Wilson County	706	\$	664 73.2%	``	ें क १७ १४	66.7%	(199)			449	263 58	58.6%	<u>∞</u>	6 33,3%	3%		•		4	66.7%	422	382 90	90.5%
•																							

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Notes: *Data were deleted where number tested was less than five.

*Total category includes all students who participated. Eithnic categories include only students identified in those categories

*Total category includes all students who participated. Eithnic categories include.



U.S. DEPARTMENT OF EDUCATION

Office of Educational Research and Improvement (OERI)
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