

Interpretive Guide to the WinScan Score Reports for the North Carolina End-of- Grade Assessments

4/21/2010

North Carolina Department of Public Instruction



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Introduction

WinScan is a software application provided to schools by the North Carolina Department of Public Instruction (NCDPI). This software permits administrators at the district level to produce a variety of score reports on demand, including Individual Student Reports, Achievement Level Frequency Reports, Class Roster Reports, Score Frequency Reports, and Goal Summary Reports. *The Interpretive Guide to the WinScan Score Reports for NC EOG Assessments* is intended to help educators understand these reports and to inform decision making at the student, classroom, school, and district levels. This guide will also help administrators and educators explain test results to parents and the general public.

For each assessment, the North Carolina Department of Public Instruction also produces an interpretive guide that is designed specifically for parents to understand the Individual Student Report (ISR). This document, entitled *Understanding the Individual Student Report* (UISR) is available online for every End-Of-Course, End-Of-Grade, and alternate assessment (<http://www.ncpublicschools.org/accountability/policies/uirs>). The UISR is designed for parents and teachers; whereas, the interpretive guides are designed for teachers and administrators at the school, district, and state levels. Together, these documents provide guidance in interpreting the many reports that are generated by the WinScan software application.

How to Use This Guide

This guide has been designed to give users quick access to the information needed when interpreting a specific WinScan report. The table of contents and the table of figures can be used to identify a sample report for any type of WinScan report. Users can learn about all of the key features of the sample report by simply matching label numbers in the sample reports to the label numbers in the *Index of Terms by Label Number*.

The WinScan Reports

Each WinScan report has a standard template. Except for the Individual Student Reports, the standard templates can be modified through user-defined options. When the standard report templates are combined with different options, assessments, and data filters, over 300 unique reports can be produced. This guide focuses on the most commonly used reports for NC EOG assessments. Table 1 shows a list of the reports described in subsequent pages and the audiences for which these reports are intended. The ISRs are designed for students, teachers, students' parents, and school administrators. Class Rosters are designed for teachers and school administrators. Score Frequency Reports, Achievement Level Frequency Reports, and Goal Summary Reports are designed for teachers, principals, district administrators, and state administrators.

Table 1 *WinScan Reports and Intended Audience*

Report	Audience				
	Parent	Teacher	Administrators		
			School	District	State
Individual Student Report	✓	✓	✓		
Class Roster Reports		✓	✓		
Score and Achievement Level Frequency Reports		✓	✓	✓	✓
Goal Summary Reports		✓	✓	✓	✓

The WinScan reporting system can aggregate data at various levels, including class, school, district, and state levels. Table 2 presents the reporting levels of each group-level WinScan report.

Table 2 *Reporting Levels for Group-Level WinScan Reports*

Report	Reporting Level			
	Class	School	District	State
Class Roster Reports	✓	✓		
Score and Achievement Level Frequency Reports	✓	✓	✓	✓
Goal Summary Reports	✓	✓	✓	✓

The WinScan reporting system can also summarize scores across various subgroups including gender (male and female), ethnicity (American Indian, Asian, Black, Hispanic, Multi-racial, and White), and grade level. Table 3 presents the standard reporting groups available for each group-level WinScan report. School districts also have the option to merge in nonstandard subgroups such as Comprehensive Exceptional Children Accountability System Exceptionality, Students with Disabilities, Targeted Assistance Schools (reading and math), Limited English Proficient, and Migrant. When multiple subgroups are selected, reports are produced for every combination of the chosen subgroups.

Table 3 *Standard Reporting Groups for Group-Level WinScan Reports*

Report	Groups			
	All	Gender	Ethnicity	Gender & Ethnicity
Class Roster Reports	✓	✓	✓	✓
Score and Achievement Level Frequency Reports	✓	✓	✓	✓
Goal Summary Reports	✓	✓	✓	✓

Note: Ethnicity includes the following subgroups: American Indian, Asian, Black, Hispanic, Multi-racial, and White.

As can be seen from Tables 2 and 3, users have many options when producing WinScan reports, including many subject areas, four possible reporting levels, and four grouping variables to choose from, resulting in over 300 individual reports.

NC End-Of-Grade Assessments

During the final weeks of the school year, students take the state-required multiple-choice North Carolina End-of-Grade Tests of reading comprehension, mathematics, and science. The Reading and Mathematics tests are administered to students at grades 3–8 as part of the statewide assessment program. Science is administered to students at grades 5 and 8. These curriculum-based achievement tests are specifically aligned to the North Carolina *Standard Course of Study* and include a variety of strategies to measure the achievement of North Carolina students. Student scores in reading comprehension, mathematics, and science from the end-of-grade tests are used for computing school growth and performance composites as required by the state-mandated ABCs Accountability Program and for determining Adequate Yearly Progress (AYP) under Title I mandates of the *No Child Left Behind Act of 2001*. Student scores are also used in determining student progress and proficiency under state-mandated Student Accountability Standards at grades 3, 5, and 8.

Key Features of the EOG Reading Comprehension Assessments:

- Reading and knowledge of vocabulary are assessed by having students read selections and answer questions related to the selections.
- The reading comprehension test at grades 3–5 consists of 58 items. The reading comprehension test at grades 6–8 consists of 62 items. Some of the reading comprehension items are field test items. The field test items do not count toward or against the student’s score.
- The selections on the test are reading materials chosen to reflect the variety of actual reading done by students in and out of the classroom.
- Students read literary selections (i.e., fiction, nonfiction, and poetry) and informational selections (i.e., content and consumer).
- The variety of selections allows for the assessment of reading for various purposes: for literary experience, to gain information, and to perform a task.

Key Features of the EOG Mathematics Assessments for Grades 3 - 5:

- The mathematics test assesses student achievement in the five strands of the mathematics curriculum: (1) Number and Operations, (2) Measurement, (3) Geometry, (4) Data Analysis and Probability, and (5) Algebra.

- The mathematics test at grades 3–7 consists of 82 items. The mathematics test at grades 8 consists of 80 items. Some of the mathematics items are field test items. The field test items do not count toward or against the student’s score.
- The minimum (“at least”) calculator requirement for grades 3–5 is a four-function calculator with memory key.
- The estimated time for students at grades 3–5 to complete the mathematics—calculator active test is 135 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of the mathematics—calculator active test at grades 3–5 may exceed four hours (240 minutes).
- The estimated time for students at grades 3–5 to complete the mathematics—calculator inactive test is 60 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of the mathematics—calculator inactive test at grades 3–5 may exceed two and one-half hours (150 minutes).
- The mathematics tests are administered on two consecutive days.

Key Features of the EOG Mathematics Assessments for Grades 6 - 8:

- The minimum (“at least”) calculator requirement for grades 6–8 is any four-function calculator with a square root function, y^x , $\pi(pi)$, and algebraic logic.
- The mathematics tests at grades 6 and 7 are administered on two consecutive days. The mathematics test at grade 8 is administered on one day.
- At grades 6 -7, the 82-item test (including field test items) is administered in two parts: Calculator Active (54 questions) and Calculator Inactive (28 questions). Students are allowed to use calculators during the Calculator Active part (66%) of the test. Students are not allowed to use calculators during the Calculator Inactive part (34%) of the test. At grade 8, the 80-item test (including field test items) is all Calculator Active.
- Students at grade 8 are allowed to use calculators for the entire test.
- The estimated time for students at grades 6 and 7 to complete the mathematics—calculator active test is 135 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of the mathematics—calculator active test at grades 6 and 7 may exceed four hours (240 minutes).

- The estimated time for students at grades 6 and 7 to complete the mathematics—calculator inactive test is 60 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of the mathematics—calculator inactive test at grades 6 and 7 may exceed two and one-half hours (150 minutes).
- The estimated time for students at grade 8 to complete the mathematics test is 150 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of the mathematics—calculator active test at grade 8 may exceed four hours (240 minutes).

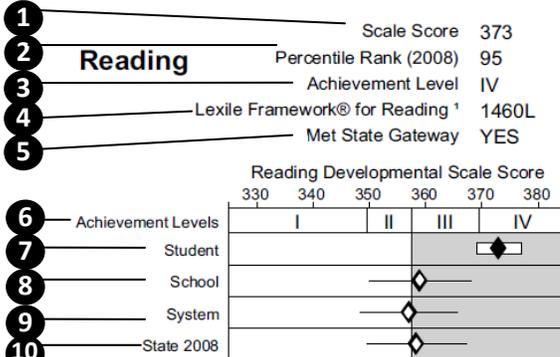
Key Features of the EOG Science Assessments:

- The end-of-grade science tests require students to demonstrate knowledge of important principles and concepts, understand and interpret laboratory activities, and relate scientific information to everyday situations.
- The science tests have a substantial focus on processing information and higher-order thinking.
- Students are allowed to use calculators during the tests.
- Some of the science items are field test items. The field test items do not count toward or against a student's score.
- The 80-item science tests (including field test items) are administered in one day.
- The estimated time for students to complete the science test is 130 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of the science test at grades 5 and 8 may exceed four hours (240 minutes).

Individual Student Reports

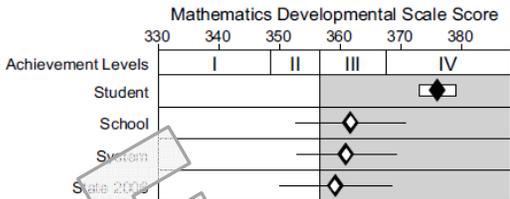
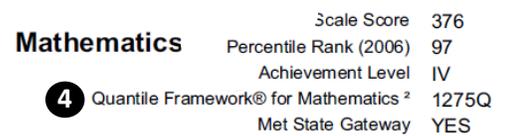
For students at grades 3 - 8 the Individual Student Report (ISR) for the NC EOG provides information concerning performance on the NC EOG for reading and mathematics. For students at grades 5 and 8 ISRs are also produced for the EOG science assessments. Sample ISR reports are provided in Figures 1 and 2. Key features are labeled and explained in the *Index of Terms by Label Number*.

For a full explanation of the information provided in this report see: <http://www.ncpublicschools.org/accountability/testing/shared/abriefs/eogreadmath>



11 Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV demonstrate a highly proficient application of reading comprehension skills required in the North Carolina *Standard Course of Study* at grade eight. Students make inferences and predictions, summarize information, generate questions and ideas, cite sources used, evaluate problems and solutions, and determine importance or accuracy of information. These students evaluate the impact of bias and emotional factors and identify effectiveness of tone, style, and use of language. Students interpret literary elements, genres, figurative language, dialogue, flashback, allusion, irony, and symbolism. They use context clues to identify and define unknown words.

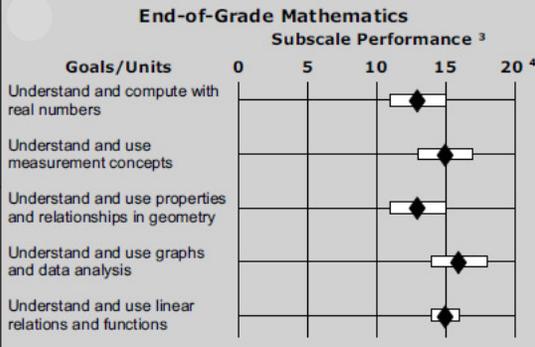
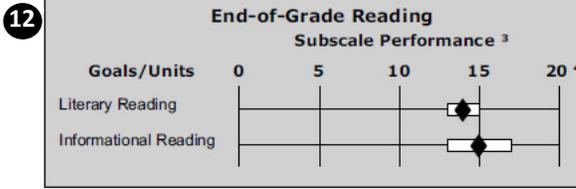


Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

Students performing at Level IV show a high level of understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies.

Level IV students consistently show a high level of understanding of real numbers, including irrational numbers. They correctly and accurately use indirect measurements. Students are consistently successful at using the Pythagorean Theorem to solve problems. Level IV students are highly successful at organizing and interpreting data, using scatterplots and approximating a line of best fit. Students at Level IV demonstrate a high level understanding of functions and are successful converting functions between forms and interpreting slope and intercepts. They are highly successful at using linear equations and inequalities to solve problems, translating between words, tables, and graphs.

¹ A Lexile® measure represents a student's reading ability and can be used to match the student with books and other materials at an appropriate difficulty level. For more information, visit <http://www.ncpublicschools.org/accountability/lexiles>.
² A Quantile® measure describes a student's mathematical ability and can be used to determine the student's readiness to learn mathematical skills and concepts. For more information, visit www.Quantiles.com.

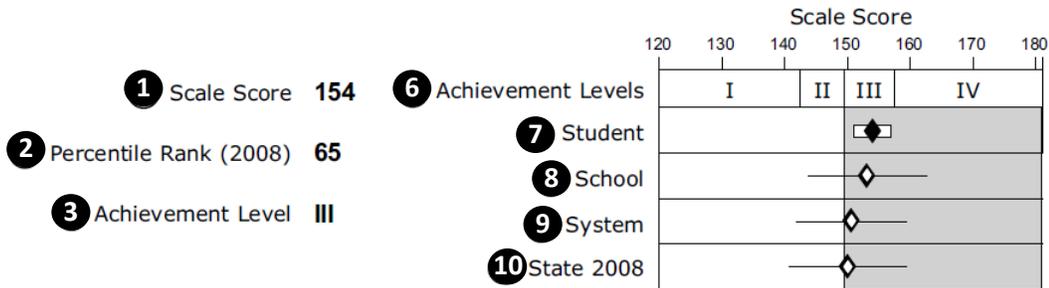


³ Please note that the subscale scores are less reliable than the scale scores because there are fewer questions on which the score is based. Instructional and placement decisions should not be based solely on these subscale scores.
⁴ The state average for all subscales is equivalent to 10. The subscale scores do not reflect the number of items aligned to each goal.

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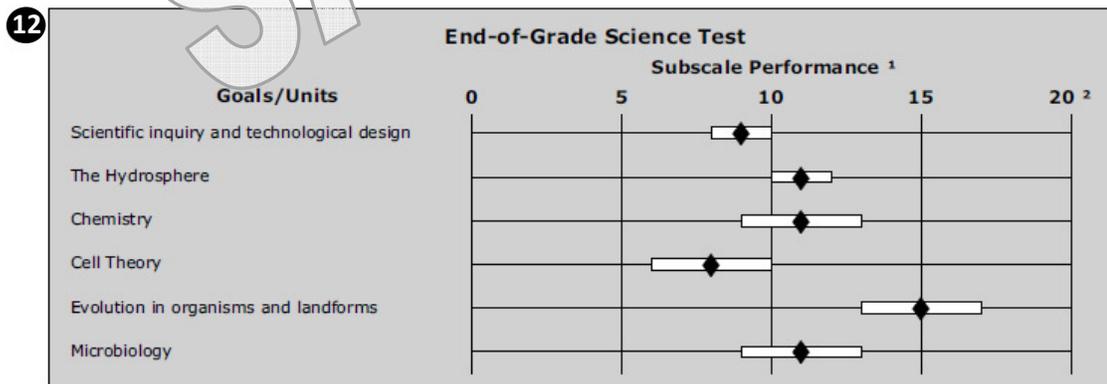
Figure 1. Sample Individual Student Report for NC EOG Reading and Mathematics Assessments.

For a publication explaining the individual student report visit: <http://www.ncpublicschools.org/accountability/testing/shared/abriefs/scienceog>



11 Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

Students performing at Achievement Level III demonstrate grade level knowledge and skills. Students demonstrate a proficient level of understanding of principles and methodologies of scientific inquiry and technological design; the distribution, use, properties, quality and stewardship of water systems; the properties of pure substances, the recognition or measurement of chemical changes in matter, and impacts of chemicals on humans, processes that affect biological and geological evolution, and how technologies can be used to monitor changes over time, the structures, functions, and processes of an animal cell, and the variety of single-celled organisms, relationships between micro-organisms and disease, human impacts on disease control, and the applications of biotechnology.



¹ Please note that the subscale scores are less reliable than the scale score because there are fewer questions on which the score is based. Instructional and placement decisions should not be based solely on these subscale scores.

² The state average for all subscales is equivalent to 10. The subscale scores do not reflect the number of items aligned to each goal. All subscale scores have values between 0 and 20.

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Figure 2. Sample Individual Student Report for NC EOG Science Assessments.

Class Roster Reports

The Class Roster Reports take on many different combinations. A Class Roster Report can contain grade-specific student scores for each content area independently or a class roster report can contain grade-specific student scores for combinations of content areas. The most typical combination for NC EOG is a Class Roster Report that displays reading and mathematics scores together on one report for a specific grade. Figure 3 displays a sample NC EOG Class Roster Report. This report is often produced at the class level and the school level. The report's features and layout do not differ across levels.

PUBLIC SCHOOLS OF NORTH CAROLINA END-OF-GRADE TESTS 2009-2010
Grade 3 Reading and Mathematics Class Roster
Regular test administration

LEASchCode = 13
InstrName = 15
TestDates = 17

HdrSchoolName = 14
ClassPeriod = 16

Name	1 Reading (50)				1 Mathematics (50)				Form
	1 Develop Scale (302-367)	4 Report# Lexile	2 2008 State* Pctile.	3 Ach. Level	1 Develop Scale (311-370)	4 Report# Quantil	2 2006 State+ Pctile.	3 Ach. Level	
1	Absent				Absent				X
2	367	965L	99	4	369	860Q	99	4	X
3	367	965L	99	4	369	860Q	99	4	D
4	303	BR <	1	1	315	EM +	1	1	B
5	346	865L	71	3	351	775Q	79	3	V
6	NCEXTEND1				NCEXTEND1				C
7	NCEXTEND2				NCEXTEND2				D
8	330	470L	24	1	339	515Q	33	3	C
9	325	345L	15	1	337	405Q	18	2	D
10	367	965L	99	4	369	860Q	99	4	D
11	350	965L	81	4	355	860Q	88	4	B
12	366	965L	99	4	369	860Q	99	4	V
13	Exempt LEP				Transfer				Z
14	366	965L	99	4	368	860Q	99	4	Z
15	Read Aloud				Misadmin				C
16	329	445L	22	1	326	235Q	5	1	C
17	Misadmin				NCEXTEND2				X
18	Signed/Cued				333	385Q	16	2	B
19	321	245L	9	1	Absent				V
20	Transfer				317	40Q	1	1	D
21	NCEXTEND2				Absent				B
22	342	765L	59	3	349	730Q	71	3	X
23	316	620L	40	2	343	600Q	48	3	B
24	337	645L	43	2	347	685Q	64	3	Z
25	321	245L	9	1	329	300Q	8	2	X
26	326	370L	16	1	312	EM +	1	1	V
27	Transfer				Transfer				V
28	316	120L	3	1	324	190Q	3	1	Z
29	367	965L	99	4	369	860Q	99	4	C
Class Means	341.2				344.4				

* The NC State reading percentile was established from 2008 statewide test data.
+ The NC State mathematics percentile was established from 2006 statewide test data.
For more information on the Lexile Measure, visit www.Lexile.com.
For more information on the Quantile Measure, visit www.Quantiles.com
1 Student assigned lowest possible score because no responses coded
2 Student did not take both parts of the math test and was absent from the missing part.
3 Student did not receive a score because reading test was read aloud or signed/cued
< A ReportedLexile value of "BR" means "Beginning Reader".
+ A ReportedQuantile value of "EM" means "Emerging Mathematician".

Figure 3. Sample Class Roster Report.

Figure 5 presents the template design of the Score Frequency Report. (The text of the report has been masked to emphasize the locations of each section of the report.) The template consists of three sections: the header (F1), a summary table of statistics (F2), and a score frequency table (F3). Figures 6 - 8 describe the contents of each section.

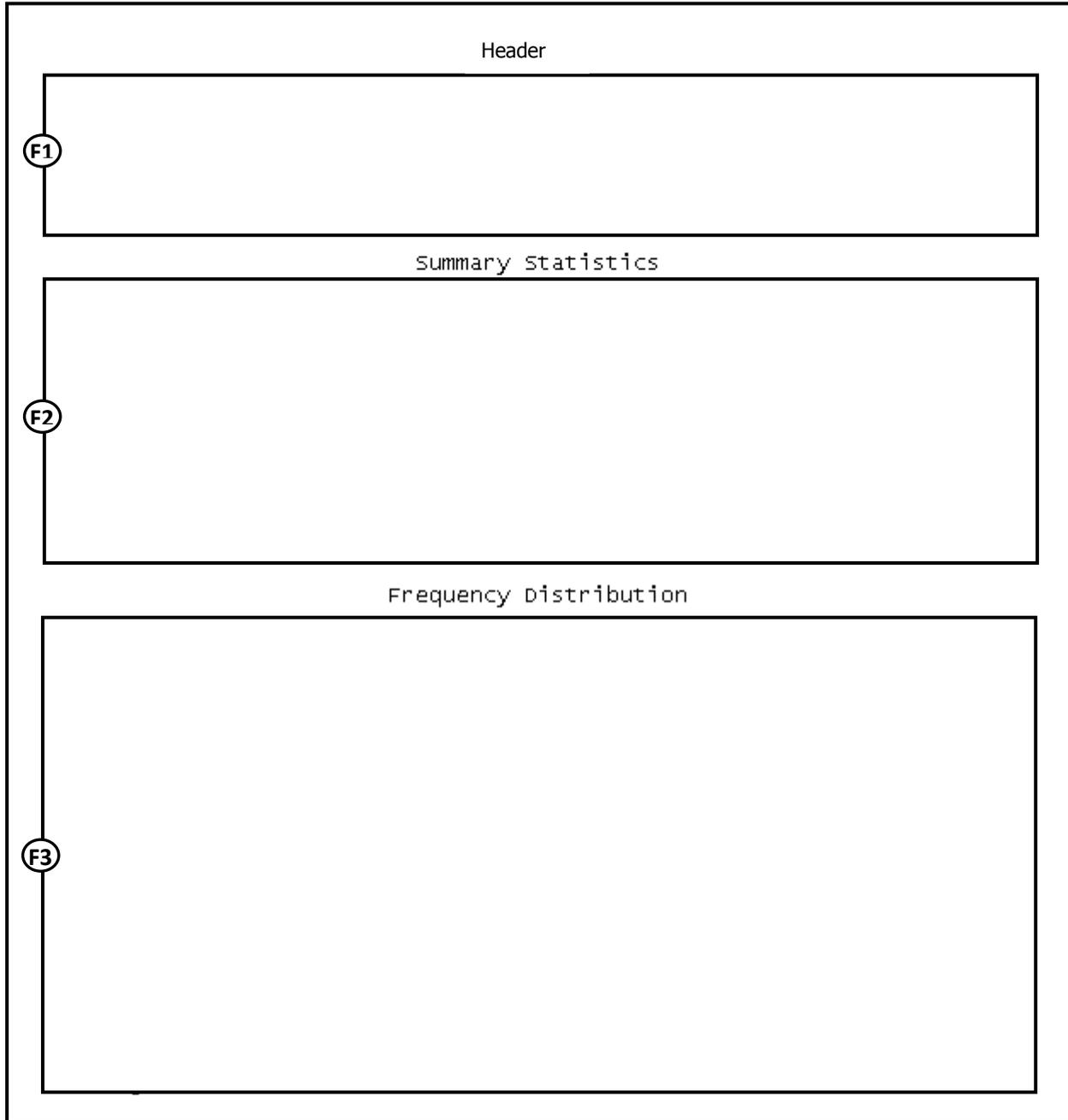


Figure 5. Template Design of the Score Frequency Report for NC EOG Assessments.

Figure 6 presents the header of a sample Score Frequency Report for the Grade 5 Science assessment. The first line of the header describes the type of assessment and the school year. The second line of the header displays the specific type of assessment, the grade, the subject area, and the type of report. The third line of the header displays the type of administration (regular, retest 1, or retest 2). LEASchCode (label 13) indicates the Local Educational Agency school code, the HdrSchoolName (label 14) indicates the school name, the InstrName (label 15) indicates the instructor's name, and the ClassPeriod (label 16) indicates the class period. TestDates (label 17) displays the examination administration dates.

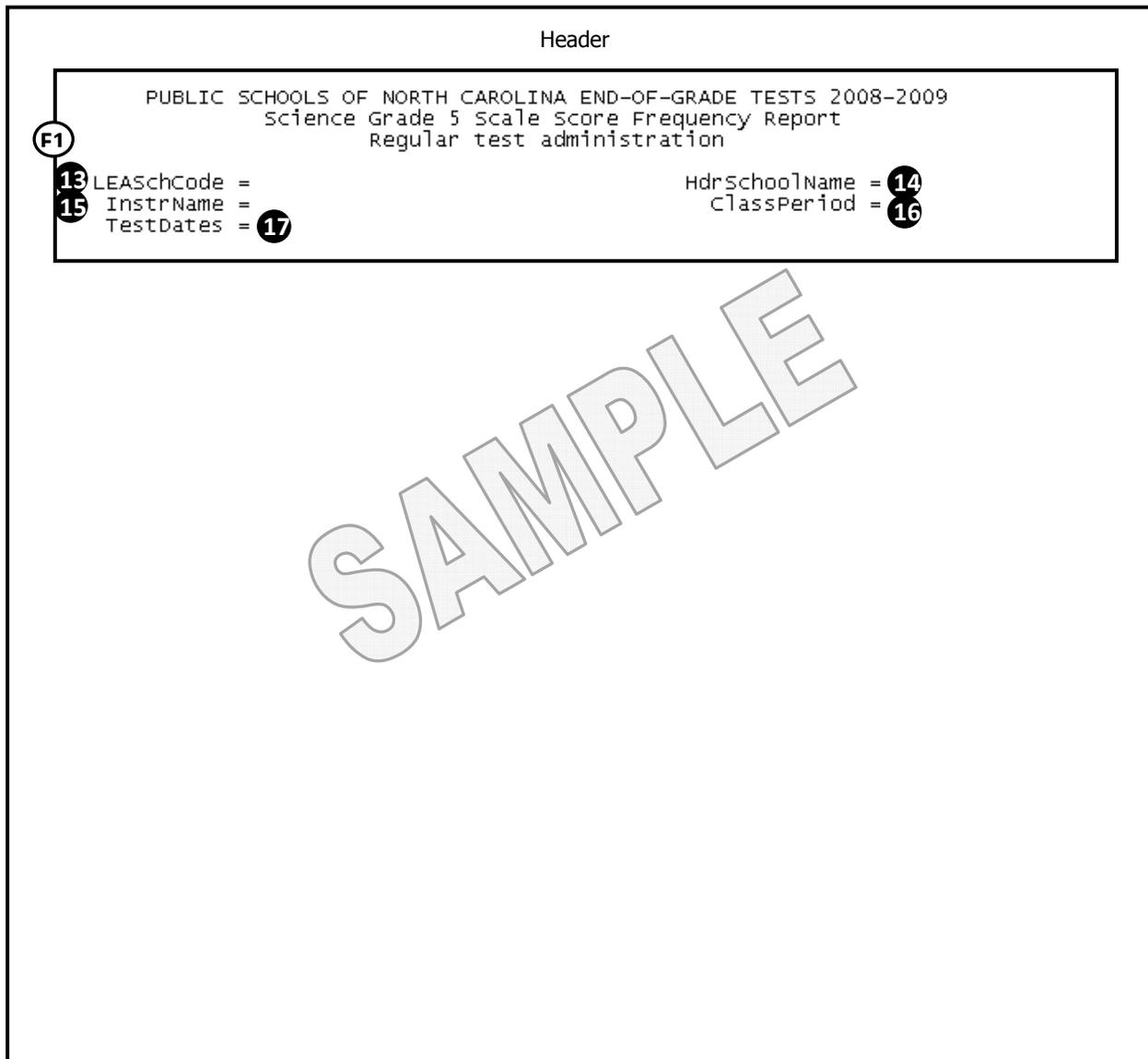


Figure 6. The Header of the Score Frequency Report for a Sample EOG Science Assessment.

Figure 7 presents the Summary Table of a sample Score Frequency Report for the EOG Grade 5 Science assessment. The top row of the summary table indicates that 18 students in this report had valid scores. The highest score was 164 and the lowest score was 133. The arithmetic mean score was 150.56 (label 18), the standard deviation was 9.77 (label 19), and the mode was 155 (label 20). The percentile scores are listed at the far right of the table (label 21). The scale scores are listed for the 10th, 25th, 50th, 75th, and 90th percentiles (label 1). In this sample, a scale score of 157 corresponds to a percentile of 75. This means that 75% of the 18 students earned a score of 157 or less.

Summary Statistics			
	Number of Students with valid Scores	18	High score 164
			Low score 133
F2	18 Mean	150.56	21 Local Percentiles
	19 Standard Deviation	9.77	Scale 1
	20 Mode	155	90 162.0
			75 157.0
			50 (Median) 153.5
			25 144.0
			10 134.0

Figure 7. The Summary Table of the Frequency Report for a Sample EOG Assessment.

Figure 8 presents the Frequency Table of the Score Frequency Report for the EOG Grade 5 Science Assessment. The Scale Score column (label 1) presents every score earned by the 18 students. The Frequency column (label 22) presents the number of students that earned each scale score. For example, 1 student earned a scale score of 157. The “Missing” label indicates that one student did not receive a score. The Cumulative Frequency column (label 23) presents the total number of students that earned up to and including a given scale score. This column shows 14 students earned up to and including a scale score of 157. The Percent column (label 24) presents the percent of students that earned a given scale score (number of students that earned the score divided by total number of observations). This column shows that 5.56% of the students earned a score of 157. The Cumulative Percent column (label 25) displays the percent of students that earned up to and including a given scale score. This column shows 77.78% of the students earned up to and including a scale score of 157. The Achievement Level column (label 3) displays the achievement level associated with each scale score. In this example, a scale score of 157 corresponds to an achievement level of III.

Frequency Distribution

Dev Scale Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	Achievement Level
164	1	18	5.56	100.00	IV
162	1	17	5.56	94.44	IV
161	1	16	5.56	88.89	IV
160	1	15	5.56	83.33	III
157	1	14	5.56	77.78	III
155	3	13	16.67	72.22	III
154	1	10	5.56	55.56	III
153	1	9	5.56	50.00	III
152	1	8	5.56	44.44	II
151	1	7	5.56	38.89	II
144	2	6	11.11	33.33	I
140	1	4	5.56	22.22	I
136	1	3	5.56	16.67	I
134	1	2	5.56	11.11	I
133	1	1	5.56	5.56	I
Missing	1				

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Figure 8 . The Frequency Table of the Frequency Report for a Sample EOG Assessment.

Achievement Level Frequency Reports

Figure 9 displays a sample Achievement Level Frequency Report for an EOG Science Assessment for Grade 5 students. The first line of the header indicates the report is for the 2008-2009 school year. The second line indicates the subject area, grade, and report type. The third line of the header displays the type of administration (regular, retest 1, or retest 2).

In this sample, the exam was a regular test administration. LEASchCode (label 13) indicates the Local Educational Agency school code, the HdrSchoolName (label 14) indicates the school name, the InstrName (label 15) indicates the instructor's name, and the ClassPeriod (label 16) indicates the class period. TestDates (label 17) displays the examination administration dates. The Science Achievement Levels column (label 3) presents every achievement level earned by the students. Students who do not have an achievement level are classified as "blank". The Frequency column (label 22) presents the number of students that earned each achievement level. The total count of students excludes blank scores. The sample shows 4 students earned an achievement level of 2. The Percent of Total column (label 24) presents the percent of students that earned a given score (number of students that earned the score divided by total number of observations). This column shows that 22.22% of the students earned an achievement level of 2. The Cumulative Frequency column (label 23) presents the total number of students that earned up to and including a score in a given row. This column shows 16 students earned up to and including an achievement level of 2. The Cumulative Percent column (label 25) displays the percent of students that earned up to and including a score in a given row. In the sample shown, 88.89% of the students earned up to and including an achievement level of 2. The summary statistics just below the frequency table show 2 of 18 students were classified as level III or IV. This indicates that 11.1% of the students were proficient. The Report Card lines provide a line for LEAs to record the score that is reported on the report card to see if the numbers match.

Goal Summary Reports

The Goal Summary Report is a grade-specific report that summarizes student performance for each learning goal or essential standard. The Goal Summary Report can group students at the school, district, or state level. Typically, the Goal Summary Report reflects scores at the goal level. Other reporting categories are beginning to be integrated that will provide teachers with additional information. For example, subscale scores for EOG mathematics will be reported with regard to items designated for calculator active sections versus calculator inactive sections on the goal summary report. Additional information has already been incorporated for EOG reading in that the goal summary report contains goal level score reporting as well as subscale scores reflecting items related to literary reading versus items related to informational reading.

Figure 10 displays a sample Goal Summary Report. Key features are labeled and explained in the *Index of Terms by Label Number*. The standard protocol for reporting subscale scores establishes that any goal with fewer than five items aligned to it does not warrant a level of reliability sufficient for score reporting. The Goal Summary report provides valid data about curriculum implementation only when 1) all four forms are administered within the same classroom, school, or LEA; 2) there are at least five students per form; and 3) approximately equal numbers of students have taken each form. It is best to compare a group's weighted mean percent correct with the state weighted mean to determine how far above or below the state weighted mean the group has performed.

PUBLIC SCHOOLS OF NORTH CAROLINA END-OF-GRADE TESTS 2007-2008 Science Grade 5 Goal Summary Report						
SystemCode =	SystemName =					
	26	27	28	29	30	
	Scale Score Mean	Number of Observations	Percent of the 60 Items per Form	Weighted Mean Percent Correct	Difference ¹ From 2008 Stat Mean Percent Correct	
Science	147.7	1660	100 %			
State 2008	150.0	105485				
State 2007	150.0	102547				
Goal 1: Conduct investigations to build an understanding of the interdependence of plants and animals.			28.33 %	56.7	-5.2	
Goal 2: Make observations and conduct investigations to build an understanding of landforms.			21.67 %	54.0	-4.4	
Goal 3: Conduct investigations and use appropriate technology to build an understanding of weather and climate.			21.67 %	50.7	-4.0	
Goal 4: Conduct investigations and use appropriate technologies to build an understanding of forces and motion in technological designs.			28.33 %	56.5	-3.7	
Number of Students Taking Form ²	E	F	G	H		
	411	427	415	407		

Figure 10. Sample EOG Goal Summary Report.

Index of Terms by Label Number

1 Scale Score - The number of test questions the student answers correctly is called a raw score. The raw score is converted to a developmental scale score. The Scale Score depicts growth in achievement from year to year. You can compare the scale scores on the End-of-Grade test given during the last three weeks of the previous school year and the End-of-Grade test given during the last three weeks of the current school year to determine a student's growth. Elsewhere in the report, the student's scale score is represented by a black diamond. Surrounding the student's diamond is a confidence band, indicated by a bar. The confidence band indicates the range of scores that would likely result if the same student completed similar forms of the same test many times.

2 Percentile Rank - The percentile rank compares a student's performance on the test this year to that of all North Carolina students who took the test in the norming year. The norming year for a test is generally the first year the test was administered. The percentile shows a student performed at a level equal to or better than the stated percentage of students who took the test during the norming year. For example, if a student scores as well as or better than 87% of the students who took the test in the norming year, the student is at the 87th percentile.

3 Achievement Level - Achievement level shows the level at which a student performed on the test. Achievement levels are predetermined performance standards that allow a student's performance to be compared to grade-level expectations. Four achievement levels (i.e., Levels I, II, III, and IV) are reported. Achievement levels of III and IV indicate proficiency. The achievement level descriptors can be viewed at <http://www.ncpublicschools.org/accountability/testing/shared/achievellevel/>.

4 Quantile or Lexile Score - The End-of-Grade mathematics tests are linked to **The Quantile Framework® for Mathematics**. The End-of-Grade reading comprehension tests are linked to the **Lexile Framework® for Reading**. Definitions of Lexiles and Quantiles follow.

Lexile Score

The Lexile Framework® measures both reader ability and text difficulty on the same scale, the Lexile scale. Lexile scores are reported from a low of BR (Beginning Reader) to a high of 2000L. Lexile scores do not translate specifically to grade levels. Using a student's Lexile score, you can match a student to books or other reading material that are similar to his or her reading ability. The lower a book's Lexile measure, the easier it will be to comprehend. For example, a text with a Lexile measure of 850L will most likely be easier for a reader to comprehend than a text at 950L. The Lexile score also allows you to

track a student's progress over time. Additional information on Lexiles can be found at <http://www.lexile.com>.

Quantile Score

To interpret what a NCDPI Division of Accountability Services/North Carolina Testing Program Quantile measure means for a student, two pieces of information are needed: the Quantile score and the grade level during which a student received the Quantile score. Typically, a higher Quantile measure within a specific grade range indicates that a student probably has very few problems with grade-level material in school. A lower Quantile measure indicates that a student most likely struggles to understand and succeed with grade-level material. Once a student's Quantile measure and grade are known, mathematical concepts, topics, materials, and resources can be identified within that same Quantile range. A student can be matched with resources and engaged in instruction to focus remediation and move forward with more demanding concepts and skills. Additional information on Quantile measures can be found at <http://www.Quantiles.com>.

5 Met State Gateway - North Carolina public school students are required to meet statewide standards for promotion from grades 3, 5, and 8 and for high school graduation. The standards, also called gateways, ensure that students are working at grade level in reading, writing, and mathematics before being promoted to the next grade. Met State Gateway is located on the end-of-grade individual student reports at grades 3, 5, and 8 and indicates if the student did (YES) or did not (NO) meet the state gateway for reading comprehension and mathematics.

6 Achievement Levels - Achievement Levels allow a student's performance to be compared to grade-level expectations. Four achievement levels (i.e., Levels I, II, III, and IV) are reported. Achievement levels of III and IV indicate proficiency. The achievement level descriptors can be viewed at <http://www.ncpublicschools.org/accountability/testing/shared/achievelevel/>.

7 Student - The diamond represents the student's scale score. Surrounding the student's diamond is a confidence band, indicated by a bar. The confidence band indicates the range of scores that would likely result if the same student completed similar tests many times.

8 School – The average school score is represented by an empty diamond. The average scale score for the school is based on the spring test administration for the given school year of the report. The line that passes behind the diamond represents the range of approximately two-thirds of the students within the grade of the assessment.

9 System - The average system score is represented by an empty diamond. The average scale score for the system is based on the spring test administration for the given school year of the report. The line that passes behind the diamond represents the range of approximately two-thirds of the students within the grade of the assessment.

10 State - The average state score is represented by an empty diamond. The state average is based on the scores of all North Carolina students who took the test in the norming year. The line that passes behind the diamond represents approximately the middle two-thirds of the students within the grade of the assessment.

11 Achievement Level Description - This paragraph describes the level of achievement that the student is expected to have mastered given their assessment score. The achievement level descriptors can be viewed at <http://www.ncpublicschools.org/accountability/testing/shared/achievellevel>.

12 Subscale Scores - The subscale score depicts achievement in a given subset of items of the exam. The state average is equal to a subscale score of 10. All subscale scores have values between 0 and 20. The subscale scores do not reflect the number of items aligned to each goal. Use caution when interpreting subscales since the number of items is small and the reliability of these scores is low. Given the lower reliability of these subscale scores, instructional or placement decisions should not be made solely on subscale scores.

13 LEASchCode refers to the Local Education Agency (LEA) school code.

14 HdrSchoolName refers to the school name.

15 InstrName refers to the instructor's name.

16 ClassPeriod refers to the class period.

17 TestDates refers to the time of year in which the exam was administered.

18 Group Means – The average of a group of scores. The mean is the sum of all scores in the roster divided by the number of scores in the roster.

19 Group Standard Deviation – The standard deviation indicates the degree of variation of scores among a group of students. The larger the standard deviation, the greater the variation there is in scores. The standard deviation is the square root of the variance of the scores.

20 Group Mode – The most common score or scores of the group.

21 Percentile – The Percentile describes the percent of all values of the scale score that are equal to or less than the scale score. The median is the midpoint of the scale score distribution and corresponds to the 50th percentile.

22 Frequency - The Frequency column presents the number of students that earned each score.

23 Cumulative Frequency – The value in the Cumulative Frequency column in a frequency table is the total number of students that earned all scores up to and including the score in the same row.

24 Percent - The Percent of Total column presents the percent of students that earned a given score (number of students that earned the score divided by total number of observations).

25 Cumulative Percent - The value in the Cumulative Percent column in frequency tables is the percent of students that earned all scores/achievement level up to and including the score/achievement level in the same row.

26 Scale Score Mean – The arithmetic mean of the scale scores for the given group.

27 Number of Observations – The number of students who earned valid scores included in this report.

28 Percent of the Items per Form – The percent of the items per form is the percent of items that align with each content goal.

29 Weighted Mean Percent Correct –A weighted mean is used to calculate the mean scores from different forms. If the count of students differs across forms, a weighted mean adjusts for the different counts across the forms. For instance, if twice as many students took one form as compared to another, this form would receive twice the weight in calculating the mean. Usually about the same numbers of students take each form, so in practice, the weighted mean is very similar to an unweighted mean.

30 Difference from 2008 State Mean Percent Correct – This difference displays performance relative to the 2008 state mean percent correct. Negative values indicate a score performance below the state mean percent correct, while positive values indicate performance above the state mean.