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

2014-15

North Carolina Department of Public Instruction

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Introduction

WinScan is a software application provided 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 (ISRs), Achievement Level Frequency Reports, Class Roster Reports, Score Frequency Reports, and Goal Summary Reports. *The Interpretive Guide to the WinScan Score Reports for NC End-of-Grade 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.

The NCDPI also produces an interpretive guide entitled *Understanding the Individual Student Report* (UISR). The UISRs are available online for the English Language Arts (ELA)/Reading, Mathematics, and Science End-of-Grade (EOG) general and alternate assessments (see http://www.ncpublicschools.org/accountability/ policies/uisrs). The UISRs are designed for parents and teachers; whereas, the *Interpretive Guide to WinScan Score Reports for the North Carolina End-of-Grade Assessments* is 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 provides users with sample WinScan reports and the information needed to interpret a specific WinScan report. Users can learn about all of the key features of the sample reports by 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 ISRs, 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 three hundred (300) unique reports can be produced. This guide focuses on the most commonly used reports for 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, school administrators, district administrators, and state administrators.

Table 1. *WinScan Reports and Intended Audience*

Report	Audience				
			Administrators		
	Parent	Teacher	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) and ethnicity (American Indian, Asian, Black, Hispanic, Two or More Races, and White). Table 3 presents the standard reporting groups available for each group-level WinScan report. 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, Two or More Races, 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 unique reports.

NC End-of-Grade Assessments

During the final ten (10) days of the school year, students take the state-required NC EOG assessments of ELA/reading, mathematics, and science. The ELA/reading and mathematics assessments 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 assessments 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 ELA/reading, mathematics, and science from the EOG assessments are used for computing school and teacher growth as well as performance composites, as required by the state-mandated READY Accountability Program. They are also used in determining Annual Measurable Objectives (AMOs) intended to improve educational outcomes for all students and close achievement gaps. AMO reporting is required under the Elementary and Secondary Education Act (ESEA) waiver obtained by North Carolina in May 2012 and the renewal granted through the 2014–15 school year. This waiver granted North Carolina flexibility regarding specific requirements of the *No Child Left Behind Act* of 2001 (NCLB).

Key Features of the EOG ELA/Reading Assessments

- Reading and knowledge of vocabulary are assessed by having students read selections and answer questions related to the selections.
- The ELA/reading assessments at grades 3–5 consist of 52 items. The ELA/reading assessments at grades 6–8 consist of 56 items. A small portion of the items are field test items. These items do not count toward or against the student's score.
- The selections on the assessment are 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: to acquire literary experience, to gain information, and to perform a task.
- The estimated time for students at grades 3–8 to complete the ELA/reading assessment is 180 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of the ELA/reading assessment at grades 3–8 may exceed 240 minutes.

Key Features of the EOG Mathematics Assessments at Grades 3–5

- The mathematics assessments at grades 3–5 assess student achievement in the five strands of the mathematics curriculum: (1) Operations and Algebraic Thinking, (2) Number and Operations in Base Ten, (3) Number and Operations—Fractions, (4) Measurement and Data, and (5) Geometry.
- The mathematics assessments at grades 3–5 consist of two sections, calculator inactive and calculator active. The minimum ("at least") calculator requirement for grades 3–5 is a four-function calculator with memory key.
- The mathematics assessments at grades 3 and 4 consist of 54 multiple-choice items.
- The mathematics assessment at grade 5 consists of 46 multiple-choice items and 8 gridded response items.
- Some of the mathematics items at grades 3–5 are experimental (field test) items. These items do not count toward or against the student's score.
- The estimated time for students at grades 3–5 to complete the mathematics assessments is 180 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of a mathematics assessment at grades 3–5 may exceed four hours (240 minutes).

Key Features of the EOG Mathematics Assessments for Grades 6–8

- The mathematics assessments at grades 6–8 assess student achievement in the five strands of the mathematics curriculum: (1) Ratios and Proportional Relationships, (2) the Number System, (3) Expressions and Equations, (4) Geometry, and (5) Statistics and Probability.
- The mathematics assessments at grades 6–8 consist of two sections, calculator inactive and calculator active.
- 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.
- At grades 6–8, the 60-item assessment has 49 multiple-choice items and 11 gridded response items. Some of the mathematics items at grades 6–8 are experimental (field test) items. These items do not count toward or against the student's score
- The estimated time for students at grades 6–8 to complete the mathematics assessments is 180 minutes. Students who are not finished at the end of the estimated time may be given

additional time. However, no administration of a mathematics assessment at grades 6–8 may exceed four hours (240 minutes).

Key Features of the EOG Science Assessments at Grades 5 and 8

- The EOG science assessments require students to demonstrate knowledge of important principles and concepts, understand and interpret laboratory activities, and relate scientific information to everyday situations.
- The science assessments have a substantial focus on processing information and higher-order thinking.
- The science assessments contain 75 multiple-choice items.
- Some of the science items are experimental (field test) items. These items do not count toward or against a student's score.
- The estimated time for students to complete the science assessments is 180 minutes. Students who are not finished at the end of the estimated time may be given additional time. However, no administration of a science assessment at grades 5 and 8 may exceed four hours (240 minutes).

Individual Student Reports

For students at grades 3–8, the ISR for the EOG provides information concerning performance on the EOG for ELA/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*.

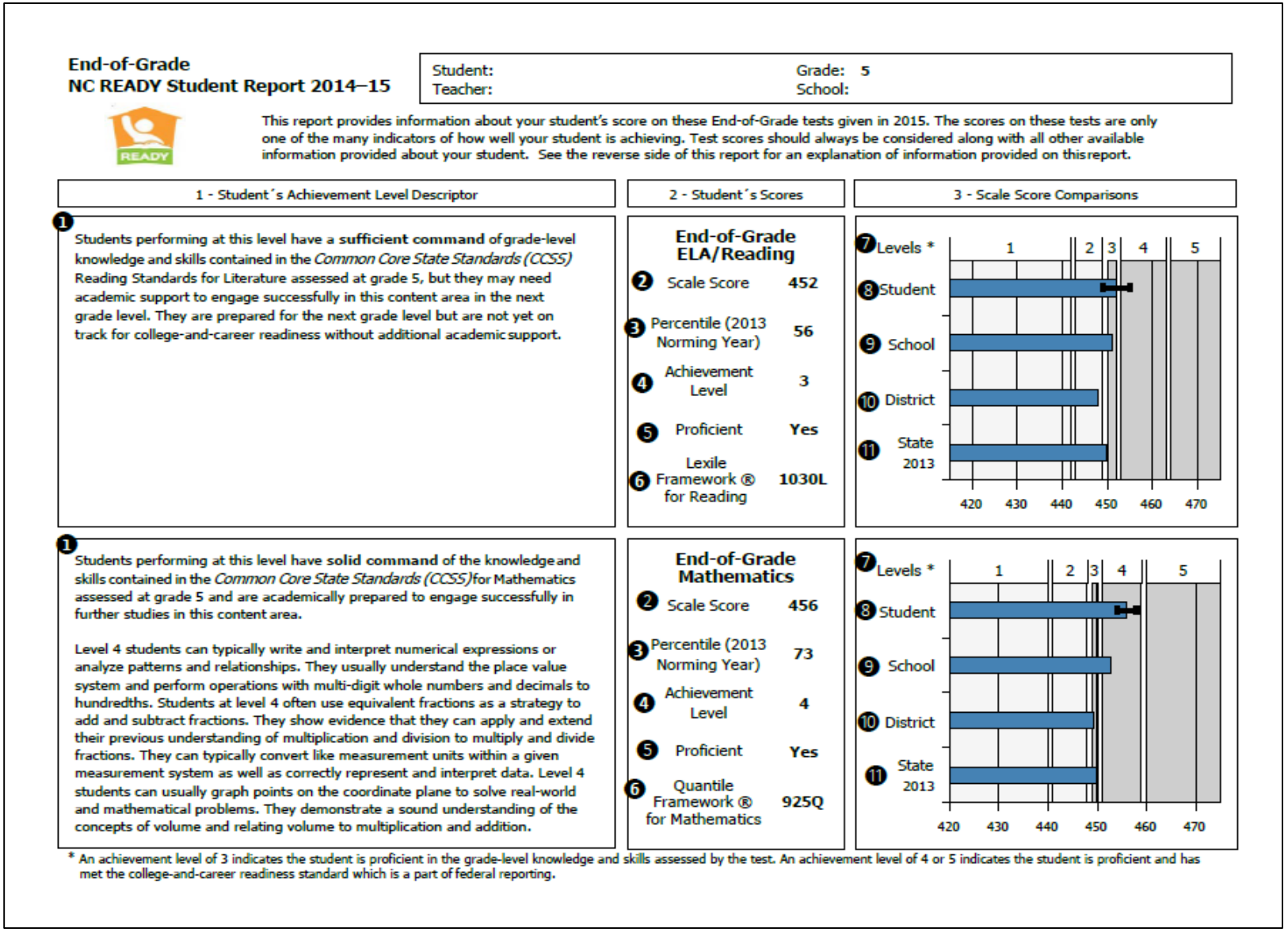


Figure 1. Sample Individual Student Report for EOG ELA/Reading and Mathematics Assessments

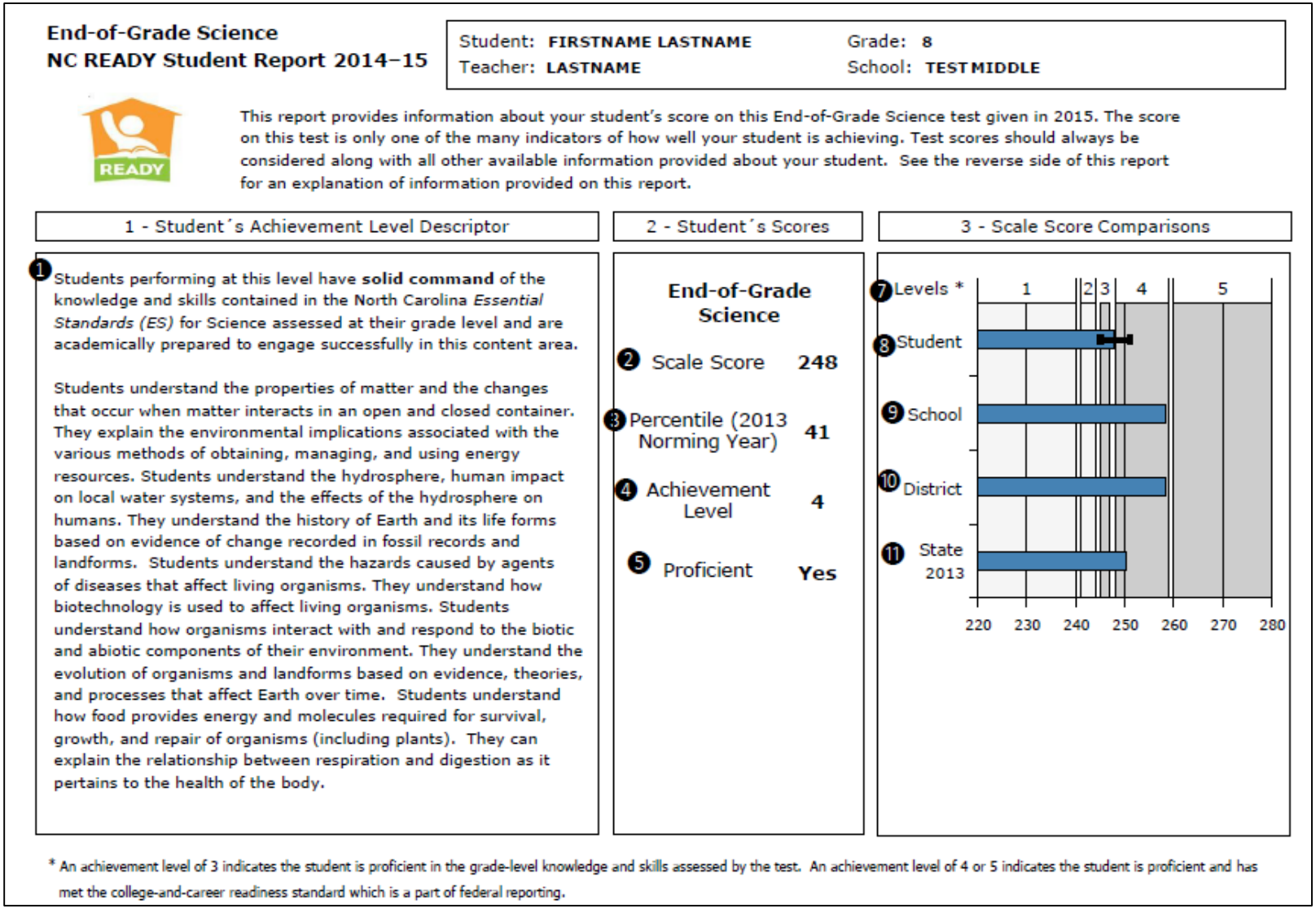
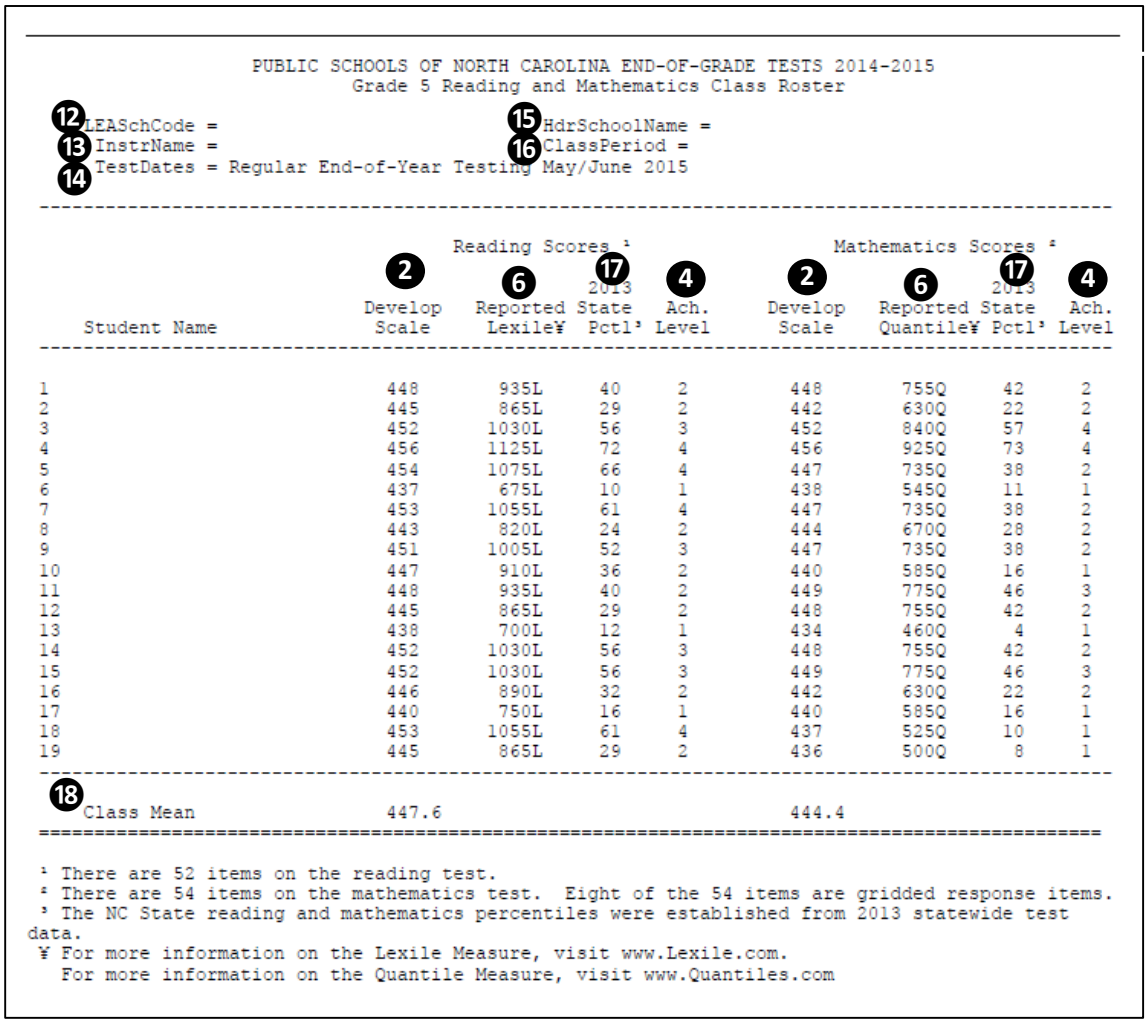


Figure 2. Sample Individual Student Report for EOG Science Assessments

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 contain grade-specific student scores for combinations of content areas. The most typical combination for the 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 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. The *Index of Terms by Label Number* can be used to learn more about each labeled feature of this report.



PUBLIC SCHOOLS OF NORTH CAROLINA END-OF-GRADE TESTS 2014-2015
Grade 5 Reading and Mathematics Class Roster

12 LEASchCode = 15 HdrSchoolName =
13 InstrName = 16 ClassPeriod =
14 TestDates = Regular End-of-Year Testing May/June 2015

	Reading Scores ¹				Mathematics Scores ⁴			
Student Name	2 Develop Scale	6 Reported Lexile¥	17 2013 State Pctl³	4 Ach. Level	2 Develop Scale	6 Reported Quantile¥	17 2013 State Pctl³	4 Ach. Level
1	448	935L	40	2	448	755Q	42	2
2	445	865L	29	2	442	630Q	22	2
3	452	1030L	56	3	452	840Q	57	4
4	456	1125L	72	4	456	925Q	73	4
5	454	1075L	66	4	447	735Q	38	2
6	437	675L	10	1	438	545Q	11	1
7	453	1055L	61	4	447	735Q	38	2
8	443	820L	24	2	444	670Q	28	2
9	451	1005L	52	3	447	735Q	38	2
10	447	910L	36	2	440	585Q	16	1
11	448	935L	40	2	449	775Q	46	3
12	445	865L	29	2	448	755Q	42	2
13	438	700L	12	1	434	460Q	4	1
14	452	1030L	56	3	448	755Q	42	2
15	452	1030L	56	3	449	775Q	46	3
16	446	890L	32	2	442	630Q	22	2
17	440	750L	16	1	440	585Q	16	1
18	453	1055L	61	4	437	525Q	10	1
19	445	865L	29	2	436	500Q	8	1
18 Class Mean	447.6				444.4			

¹ There are 52 items on the reading test.
⁴ There are 54 items on the mathematics test. Eight of the 54 items are gridded response items.
³ The NC State reading and mathematics percentiles were established from 2013 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

Figure 3. Sample Class Roster Report.

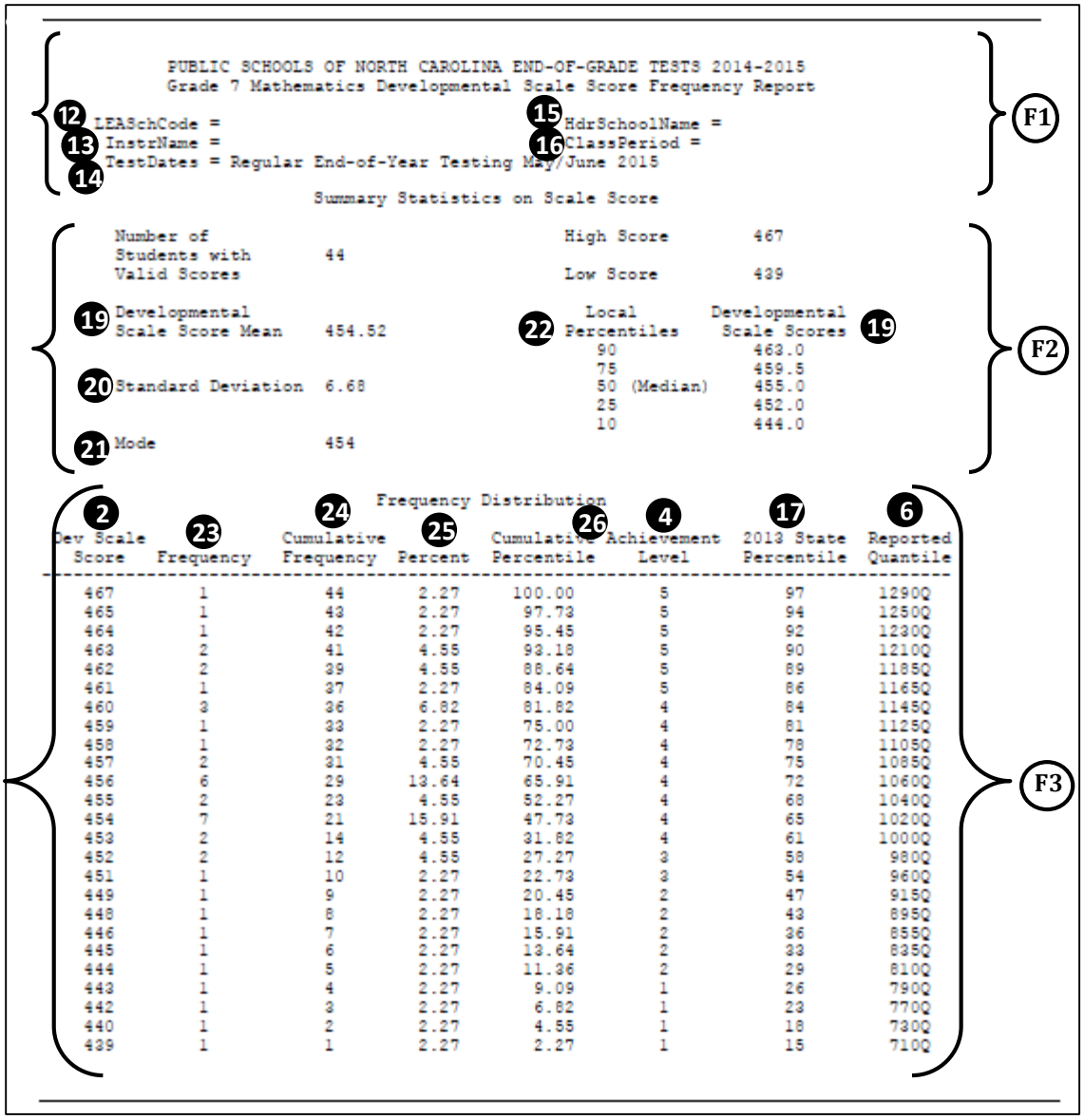
Scale Score Frequency Reports

Frequency tables are used to summarize large quantities of scores. The Scale Score Frequency Reports available in WinScan are used to summarize scale score information at the class, school, district, and state levels. The WinScan Scale Score Frequency Report presents the frequency, percent, cumulative frequency, and cumulative percent of each scale score at a specific grade. These reports can be created for each EOG assessment. Figure 4 presents a sample Score Frequency Report for an EOG mathematics assessment. The *Index of Terms by Label Number* can be used to learn more about each labeled feature of this report.

The Score Frequency Report consists of three sections: the header (section label F1), a summary table of statistics (section label F2), and a score frequency table (section label F3).

The first line of the sample Score Frequency Report header describes the type of assessment (EOG) and the school year (2014-15). The second line of the header displays the specific grade, the subject area, and the type of report.

The top row of the summary table (section label F2) indicates that 44 students in this report had valid scores. The highest score was 467 and the lowest score was 439.



PUBLIC SCHOOLS OF NORTH CAROLINA END-OF-GRADE TESTS 2014-2015
Grade 7 Mathematics Developmental Scale Score Frequency Report

12 LEASchCode =
13 InstrName =
14 TestDates = Regular End-of-Year Testing May/June 2015
15 HdrSchoolName =
16 ClassPeriod =

F1

Summary Statistics on Scale Score

Number of Students with Valid Scores	44	High Score	467
		Low Score	439
19 Developmental Scale Score Mean	454.52		
20 Standard Deviation	6.68		
21 Mode	454		

22 Local Percentiles	19 Developmental Scale Scores
90	463.0
75	459.5
50 (Median)	455.0
25	452.0
10	444.0

F2

Frequency Distribution

2 Dev Scale Score	23 Frequency	24 Cumulative Frequency	25 Percent	26 Cumulative Percentile	4 Achievement Level	17 2013 State Percentile	6 Reported Quantile
467	1	44	2.27	100.00	5	97	1290Q
465	1	43	2.27	97.73	5	94	1250Q
464	1	42	2.27	95.45	5	92	1230Q
463	2	41	4.55	93.18	5	90	1210Q
462	2	39	4.55	88.64	5	89	1185Q
461	1	37	2.27	84.09	5	86	1165Q
460	3	36	6.82	81.82	4	84	1145Q
459	1	33	2.27	75.00	4	81	1125Q
458	1	32	2.27	72.73	4	78	1105Q
457	2	31	4.55	70.45	4	75	1085Q
456	6	29	13.64	65.91	4	72	1060Q
455	2	23	4.55	52.27	4	68	1040Q
454	7	21	15.91	47.73	4	65	1020Q
453	2	14	4.55	31.82	4	61	1000Q
452	2	12	4.55	27.27	3	58	980Q
451	1	10	2.27	22.73	3	54	960Q
449	1	9	2.27	20.45	2	47	915Q
448	1	8	2.27	18.18	2	43	895Q
446	1	7	2.27	15.91	2	36	855Q
445	1	6	2.27	13.64	2	33	835Q
444	1	5	2.27	11.36	2	29	810Q
443	1	4	2.27	9.09	1	26	790Q
442	1	3	2.27	6.82	1	23	770Q
440	1	2	2.27	4.55	1	18	730Q
439	1	1	2.27	2.27	1	15	710Q

F3

Figure 4. Sample Score Frequency Report for EOG Assessments.

The LEASchCode (Label 12) indicates the Local Educational Agency school code, the InstrName (Label 13) indicates the instructor's name, TestDates (Label 14) indicates the time of year in which the exam was administered, the HdrSchoolName (Label 15) indicates the school name, and the ClassPeriod (Label 16) indicates the class period.

The arithmetic mean of the developmental scale score was 454.52 (Label 19), the standard deviation was 6.68 (Label 20), and the mode was 454 (Label 21). The percentile scores are listed at the far right of the table (label 19). The scale scores are listed for the 10th, 25th, 50th, 75th, and 90th percentiles (label 22). In this sample, a scale score of 459.5 corresponds to a percentile of 75. This means that 75 percent of the 44 students earned a score of 459.5 or less.

In the score frequency table (section label F3) the Dev Scale Score column (Label 2) presents every score earned by the 44 students. The Frequency column (Label 23) on the report presents the number of students that earned each scale score. For example, 6 students earned a scale score of 456. A "Missing" label would indicate that one student did not receive a score.

The Cumulative Frequency column (Label 24) presents the total number of students that earned up to and including a given scale score. This column shows 29 students earned up to and including a scale score of 456.

The Percent column (Label 25) 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 13.64 percent of the students earned a score of 456.

The Cumulative Percent column (Label 26) displays the percent of students that earned up to and including a given scale score. This column shows 65.91 percent of the students earned up to and including a scale score of 456.

The Achievement Level column (Label 4) displays the achievement level associated with each scale score. In this example, a scale score of 456 corresponds to an achievement level of 4.

The 2013 State Percentile column (Label 17) displays to the ELA/reading and mathematics percentiles that were established from 2013 statewide assessment data. This column shows that a scale score of 456 was in the 72nd percentile in 2013.

The Reported Quantile column (Label 6) displays the Quantile Score**.** This example shows that a scale score of 456 is linked to a Quantile of 1060Q. For the EOG ELA/reading assessment the column displays the Reported Lexile.

Achievement Level Frequency Reports

Figure 5 displays a sample Achievement Level Frequency Report for an EOG ELA/Reading and Mathematics assessment. The first line of the header indicates the report is for the 2014-2015 school year. The second line indicates the grade level and report type.

LEASchCode (Label 12) indicates the Local Educational Agency school code, the InstrName (Label 13) indicates the instructor's name, TestDates (Label 14) indicates the type of administration and the time of year that the exam was administered (Regular End-of-Year Testing May/June 2015), the HdrSchoolName (Label 15) indicates the school name, and the ClassPeriod (Label 16) indicates the class period.

The Reading and Mathematics Achievement Levels column (Label 4) presents every achievement level earned by the students. Students who do not have an achievement level are classified as "blank."

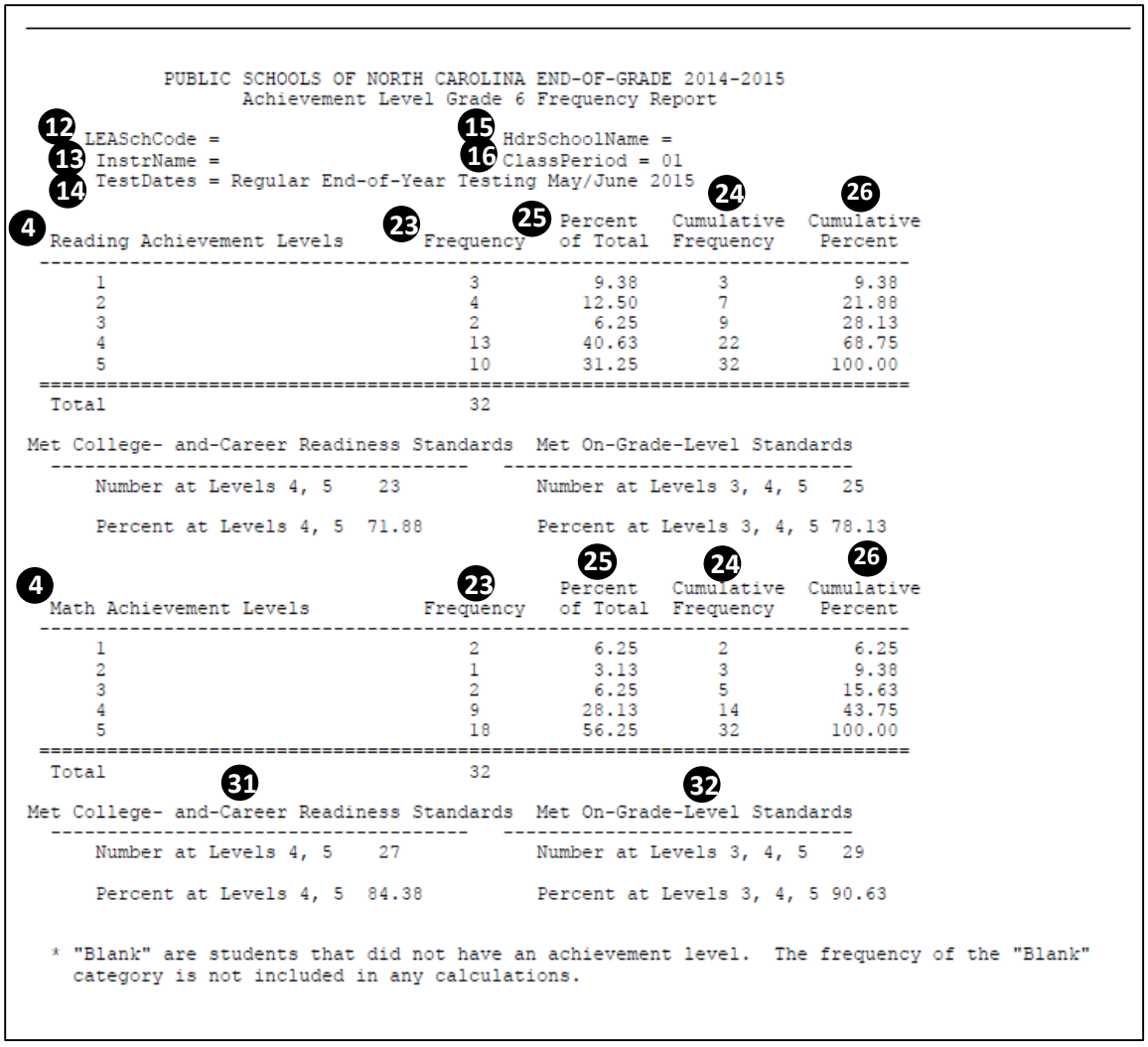
The Frequency column (Label 23) presents the number of students that earned each achievement level. The total count of students excludes blank scores. The sample shows 13 students earned an achievement level of 4 in reading and 9 in mathematics.

The Percent column (Label 25) presents the percent of students that earned a given achievement level (number of students that earned the achievement level divided by total number of observations). This column shows that 40.63 percent of the students earned an achievement level of 4 in reading and 28.13 percent in Mathematics.

The Cumulative Frequency column (Label 24) presents the total number of students that earned up to and including an achievement level in a given row. This column shows 22 students earned up to and including an achievement level of 4 in reading and 14 students in mathematics earned up to and including an achievement level of 4.

The Cumulative Percent column (Label 26) displays the percent of students that earned up to and including an achievement level in a given row. In the sample shown, 68.75 percent of the students earned up to and including an achievement level of 4 in reading and 43.75 percent in mathematics.

The summary statistics just below the frequency table show 23 of 32 students were classified as level 4 or 5 and 25 of the 32 were classified as level 3, 4, or 5 in reading. This corresponds to 78.13 percent of the students at grade-level proficient (levels 3 and above) and 71.88 percent at college and career ready (levels 4 and above) in reading. In math, 27 of 32 students were classified as level 4 or 5 and 29 of the 32 were classified as level 3, 4, or 5. This indicates that I math 90.63 percent of the students were grade-level proficient (levels 3 and above) and 84.38 percent were college and career ready (levels 4 and above).



PUBLIC SCHOOLS OF NORTH CAROLINA END-OF-GRADE 2014-2015
Achievement Level Grade 6 Frequency Report

12 LEASchCode =
15 HdrSchoolName =
13 InstrName =
16 ClassPeriod = 01
14 TestDates = Regular End-of-Year Testing May/June 2015

4 Reading Achievement Levels	23 Frequency	25 Percent of Total	24 Cumulative Frequency	26 Cumulative Percent
1	3	9.38	3	9.38
2	4	12.50	7	21.88
3	2	6.25	9	28.13
4	13	40.63	22	68.75
5	10	31.25	32	100.00
Total	32			

Met College- and-Career Readiness Standards		Met On-Grade-Level Standards	
Number at Levels 4, 5	23	Number at Levels 3, 4, 5	25
Percent at Levels 4, 5	71.88	Percent at Levels 3, 4, 5	78.13

4 Math Achievement Levels	23 Frequency	25 Percent of Total	24 Cumulative Frequency	26 Cumulative Percent
1	2	6.25	2	6.25
2	1	3.13	3	9.38
3	2	6.25	5	15.63
4	9	28.13	14	43.75
5	18	56.25	32	100.00
Total	32			

31 Met College- and-Career Readiness Standards		32 Met On-Grade-Level Standards	
Number at Levels 4, 5	27	Number at Levels 3, 4, 5	29
Percent at Levels 4, 5	84.38	Percent at Levels 3, 4, 5	90.63

* "Blank" are students that did not have an achievement level. The frequency of the "Blank" category is not included in any calculations.

Figure 5. Achievement Level Frequency Report for EOG ELA/Reading and Mathematics Assessments.

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 report reflects scores at the goal level. Future reports will provide teachers with additional information. For example, subscale scores for EOG mathematics will be reported with 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 6 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 requires that any goal with fewer than five (5) items does not produce a level of reliability sufficient for score reporting. The Goal Summary Report provides valid data about curriculum implementation only when 1) all forms are administered within the same classroom, school, or LEA; 2) there are at least five (5) 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 2013-2014
Grade 8 Goal Summary Report
Regular test administration

33 SystemCode =

34 SystemName =

	19 Developmental Scale Score Mean	35 Number of Valid Scores	28 Pct of Read Items per Form [1]	29 Weighted Mean Pct Correct	30 Diff from 2013 State Mean Pct Correct [2]
Reading	455.6	1840	100.0		
State 2013 [3]	458.7	108923			
Common Core English Language Arts Concepts					
Language			20.3	64.5	-5.1
Reading: Literature			33.6	61.3	-3.1
Reading: Informational Text			46.2	56.1	-6.5

	19 Developmental Scale Score Mean	35 Number of Valid Scores	28 Pct of Math Items per Form [1]	29 Weighted Mean Pct Correct	30 Diff from 2013 State Mean Pct Correct [2]
Mathematics	447.6	1843	100.0		
State 2013 [3]	450.0	109580			
Calculator Inactive			30.0	35.0	-5.1
Gridded Response Items			18.0	22.5	-5.2
Calculator Active			70.0	48.7	-4.6
Common Core Mathematics Domains					
Functions			24.0	44.8	-5.4
The Number System			6.0	17.8	-4.8
Expressions and Equations			32.0	42.5	-5.8
Geometry			22.0	54.3	-2.2
Statistics and Probability			16.0	45.2	-5.2

[1] Domains may not sum to 100 due to rounding.
[2] The test forms used year to year may be different. Tests are equivalent at the total score level, not at the goal or objective level. Thus, forms from year to year may have more or less difficult items on a particular goal or objective.
[3] The goal summary report provides valid data about curriculum implementation when all forms are administered within the same classroom/school/LEA, there are at least five students per form, and 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.

The Common Core English Language Arts Standard can be found at
http://www.corestandards.org/ELA-Literacy

The Grade 8 Common Core Mathematics Overview can be found at
http://www.corestandards.org/Math/Content/8/introduction

Figure 6. Sample EOG Goal Summary Report

Index of Terms by Label Number

❶ **Student's Achievement Level Descriptor**—The student level descriptor describes the level of achievement that the student is expected to have mastered given his or her assessment score. The achievement level descriptors can be viewed at http://www.ncpublicschools.org/accountability/testing//shared/achievelevel.

❷ **Scale Score**—The number of assessment questions the student answers correctly is called a raw score. The raw score is converted to a developmental scale score.

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

❹ **Achievement Levels / Levels / Ach. Level**—The achievement level shows the level at which a student performed on the assessment. Achievement levels are predetermined performance standards that allow a student's performance to be compared to grade-level expectations. Five achievement levels (i.e., Levels 1, 2, 3, 4, and 5) are reported. Achievement levels of 3, 4, and 5 indicate grade-level proficiency. Achievement levels of 4 and 5 indicate college and career readiness. The achievement level descriptors can be viewed at http://www.ncpublicschools.org/accountability/testing/shared/achievelevel/.

❺ **Proficient**— Proficient indicates whether the student has met (Yes) or not met (No) the grade-level proficiency standards.

❻ **Quantile or Lexile Score—**The EOG mathematics tests are linked to the Quantile Framework® for Mathematics. The EOG ELA/reading test 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 a student can be matched 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 one 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 **Quantile® score** 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.

❼ **Levels**—The 5 achievement levels (described under Label 4) are listed across the top of the graph.

❽ **Student**—This blue bar represents the student's scale score on the particular assessment. Surrounding the student's scale score is a confidence interval, indicated by a black line. The confidence interval indicates the range of scores that would likely result if the same student completed similar tests many times.

❾ **School**—The average school score is represented by this blue bar. The average scale score for the school is based on fall and/or spring test administration data for the given school year.

❿ **District**—The average district score is represented by this blue line. The average scale score for the district is based on fall and/or spring test administration data for the given school year.

⓫ **State**—The average state score for 2013 is represented by this blue bar. The state average is based on the scores of all North Carolina students who took the test in the norming year (2013).

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

⓭ **InstrName** refers to the instructor's name.

⓮ **TestDates** describes the time of year in which the exam was administered.

⓯ **HdrSchoolName** refers to the school name.

⓰ **ClassPeriod** refers to the class period.

⓱ **2013 State Pctl (Percentile)** refers to the ELA/reading and mathematics percentiles that were established from 2013 statewide assessment data (also see Label 3 above).

⓲ **Class Mean**—The class mean is the average of the class scores. The mean is the sum of all scores in the roster divided by the number of scores in the roster.

⓳ **Developmental Scale Score Mean**—The group mean is the average of a group of scores. The mean is the sum of all scores in the report divided by the number of scores in the report.

⓴ **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.

㉑ **Mode**—The group mode is the most common score or scores of the group.

㉒ **Percentile**—The percentile describes the percent of all values of the scale score in the report that are equal to or less than the scale score presented in the next column. The median is the midpoint of the scale score distribution and corresponds to the 50^{th} percentile.

㉓ **Frequency**—The Frequency column presents the number of students that earned each score.

㉔ **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.

㉕ **Percent (Percent of Total)**—The percent of total column presents students that earned each score (number of students that earned the score divided by the total number of observations).

㉖ **Cumulative Percentile (Cumulative Percent)—**The value in the cumulative percent column is the percent students that earned all scores/achievement level up to and including the score/achievement level in the same row.

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

㉘ **Percent of the Read/Math 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. 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 2013 State Mean Percent Correct—**This difference displays performance relative to the 2013 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.

31 **Met College and Career Readiness Standards—**The number and percent of students in the report who have met the College and Career Readiness Standards (Levels 4 and 5).

32 **Met On-Grade-Level Standards—**The number and percent of students in the report who have met On-Grade-Level Standards (levels 3, 4 and 5).

33 **SystemCode** refers to the LEA school code.

34 **SystemName** refers to the LEA or District Name.

35 **Number of Valid Scores** refers to the number of valid scores, used as the denominator in calculating the mean.