



# **Florida Standards Assessments**

**2014–2015**

## **Volume 6 Score Interpretation Guide**

## **ACKNOWLEDGEMENTS**

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## **1. FLORIDA SCORE REPORTS**

The Florida Standards Assessments (FSA) were first administered to students during the spring of 2015, replacing the Florida Comprehensive Assessment Test 2.0 (FCAT 2.0) Reading, Writing and Mathematics assessments. The FSA was primarily delivered as an online, fixed-form assessment, making use of several technology-enhanced item types. Reading and Mathematics paper-based forms were administered to all students in grades 3 and 4, and paper-based versions were available to students in grades 5 through 10 and those participating in End-of-Course (EOC) assessments, only if such a need was indicated on a student’s Individual Educational Plan (IEP) or Section 504 Plan. The FSA Writing component was administered on paper for students in grades 4 through 7 and online for students in grades 8 through 10, with paper-based accommodations offered to students whose IEP or Section 504 Plans stipulated that need. Students in grade 3 were not administered a Writing component.

By statute, all Florida public school students were required to participate in the statewide assessments. Students took the FSA ELA Reading, ELA Writing, Mathematics, and EOC assessments in the spring. EOC assessments were also administered in summer 2015.

The purpose of this volume, Score Interpretation Guide, is to document the features of the FSA reporting system, which was designed to assist stakeholders in understanding and appropriately using the results of the state assessments. Additionally, this volume describes the score types reported for the spring 2015 assessments and the appropriate uses and inferences that can be drawn from those score types.

### **1.1 OVERVIEW OF FLORIDA’S SCORE REPORTS**

FSA Reading, Writing, Mathematics, and three EOCs were administered in the spring. Reading and Writing responses were combined to create an overall English Language Arts (ELA) scale score. Until new performance standards for the FSA were in place and in order to make student-level promotion and graduation decisions prior to standard setting, statutory requirements called for linking 2015 student performance on Grade 3 ELA, Grade 10 ELA, and Algebra 1 to 2014 student performance on Grade 3 FCAT 2.0 Reading, Grade 10 FCAT 2.0 Reading, and the NGSSS Algebra 1 EOC, respectively. Legislation required that students scoring in the bottom quintile of the FSA Grade 3 ELA test be identified and reported to districts in order for the scores to be considered in the decision to promote students to Grade 4. For Grade 10 ELA and Algebra 1, a linked score was reported as well as the student’s passing status. In Fall 2015, test scores from each Spring 2015 assessment were provided to districts and schools through the FSA Online Reporting System (ORS), after FDOE verified the student and score information included in the data files and score reports. The FSA ORS provided information on student performance and aggregated summaries at several levels—state, district, and school. Additionally, printed Student Reports were delivered to districts, packaged by school, for distribution to parents. Schools and districts were also able to view and download an electronic copy of the Student Report for their students.

The FSA ORS (accessible at <https://fl.reports.airast.org>) is a web-based application that provided access to the FSA results at various, appropriate levels. The testing information available to any given user was based on his or her user role. There were two basic levels of user roles: the district level and the school level. Each user was granted drill-down access based on his or her assigned

user role. This meant that schools could access data for the students only in their school, while districts could access data for the schools and students in their district.

The following users had access to the system:

- State users: Access to all data at the state, district, school, and student levels.
- District Assessment Coordinator (DAC) users: Access to all data for their district and the schools and students in their district.
- School Administrator users: Access to all data for their school and the students in their school.

Access to the reports was password-protected, and users were able to access data at their assigned level and below. For example, a School Administrator could access the School Reports and Student Reports for his or her school but not for another school.

The Spring 2015 test results were released via the ORS, while the Summer 2015 FSA EOC test results were released via the FDOE Sharefile and the FDOE score release system. Section 1.5 provides detailed information about the FDOE Sharefile and FDOE score release system.

## 1.2 OVERALL SCORES AND REPORTING CATEGORIES

Each student received one score for each subject tested. A student’s score was based only on the operational items on the assessment; the computation of the various student scores is outlined below and discussed further in Volume 1.

For Spring and Summer 2015, both T scores and percentile ranks were reported because standard setting was not yet completed when scores were required to be reported. T scores are standardized scores with a mean of 50 and a standard deviation of 10. The percentile rank of a score is the percentage of scores (T scores) in its frequency distribution which are at or below the score. The statistical methods used to calculate T scores and percentile rank are described in Section 2.3 and Section 2.4.

Student-level reports also provided the possible number of points for each reporting category and the number of points that were earned in each of these categories. The points earned and points possible for each reporting category were established using the same items used to calculate overall scores. The points possible may vary, depending on the test forms (e.g., online vs. accommodated). Table 1, Table 2, and Table 3 display the reporting categories by subject.

*Table 1: Reporting Categories for ELA*

Grade	Reporting Category
3	<ol style="list-style-type: none"> <li>1. Key Ideas and Details</li> <li>2. Craft and Structure</li> <li>3. Integration of Knowledge and Ideas</li> <li>4. Language and Editing Task</li> </ol>
4–10	<ol style="list-style-type: none"> <li>1. Key Ideas and Details</li> <li>2. Craft and Structure</li> <li>3. Integration of Knowledge and Ideas</li> <li>4. Language and Editing Task</li> <li>5. Text-based Writing</li> </ol>

**Table 2: Reporting Categories for Mathematics**

<b>Grade</b>	<b>Reporting Category</b>
3	<ol style="list-style-type: none"> <li>1. Operations, Algebraic Thinking, and Numbers in Base Ten</li> <li>2. Numbers and Operations – Fractions</li> <li>3. Measurement, Data, and Geometry</li> </ol>
4	<ol style="list-style-type: none"> <li>1. Operations and Algebraic Thinking</li> <li>2. Numbers and Operations in Base Ten</li> <li>3. Numbers and Operations – Fractions</li> <li>4. Measurement, Data, and Geometry</li> </ol>
5	<ol style="list-style-type: none"> <li>1. Operations, Algebraic Thinking, and Fractions</li> <li>2. Numbers and Operations in Base Ten</li> <li>3. Measurement, Data, and Geometry</li> </ol>
6	<ol style="list-style-type: none"> <li>1. Ratio and Proportional Relationships</li> <li>2. Expressions and Equations</li> <li>3. Geometry</li> <li>4. Statistics and Probability</li> <li>5. The Number System</li> </ol>
7	<ol style="list-style-type: none"> <li>1. Ratio and Proportional Relationships</li> <li>2. Expressions and Equations</li> <li>3. Geometry</li> <li>4. Statistics and Probability</li> <li>5. The Number System</li> </ol>
8	<ol style="list-style-type: none"> <li>1. Expressions and Equations</li> <li>2. Functions</li> <li>3. Geometry</li> <li>4. Statistics &amp; Probability and The Number System</li> </ol>

**Table 3: Reporting Categories for EOC**

<b>Course</b>	<b>Reporting Category</b>
Algebra 1	<ol style="list-style-type: none"> <li>1. Algebra and Modeling</li> <li>2. Functions and Modeling</li> <li>3. Statistics and the Number System</li> </ol>
Algebra 2	<ol style="list-style-type: none"> <li>1. Algebra and Modeling</li> <li>2. Functions and Modeling</li> <li>3. Statistics, Probability, and the Number System</li> </ol>
Geometry	<ol style="list-style-type: none"> <li>1. Congruence, Similarity, Right Triangles and Trigonometry</li> <li>2. Circles, Geometric Measurement and Geometric Properties with Equations</li> <li>3. Modeling with Geometry</li> </ol>

### 1.3 AVAILABLE REPORTS OF THE ONLINE REPORTING SYSTEM

The FSA ORS was hierarchically structured. The interactive home page had a drop-down menu with a list of aggregated units (e.g., districts, schools within a district) from which the user could choose. An authorized user was able to view reports at his or her own aggregated unit and additionally any lower level of aggregation. For example, a school user could view only the reports and data at the school and student levels at his or her school. DAC users could view the reports and data for their districts and also the student-level results at all of their schools.

The ORS provided two main features. The first major feature was called Interactive Reports, which provided score data for each of the FSA assessments. Users could compare score data of individual students with the school, district, or overall state average scores. The second major feature was the Reports & Files feature; this feature allowed users to generate customized participation reports which indicated the students who had completed or needed to complete computer-based testing, view participation summary statistics (counts and percentages) of students who had tested, and download data files and static reports.

Sample ORS training materials are included in Appendix A of this volume.

Table 4 summarizes the types of score reports that were available in the FSA ORS and the levels at which the reports could be viewed. A description of each report is also provided below.

*Table 4: Florida Online Score Reports Summary*

Type of Report Page	Level	Description
Interactive Report Home	District, school	Summary of performance and participation (Number of Students and Mean T score) across grades and subjects
Subject Detail	District, school	Overall performance for a subject and a grade for all students
State Summary	State	Summary of overall performance for a subject and a grade for all students in the state
District Summary	District	Summary of overall performance for a subject and a grade for all students in the district
State Report of Districts	State	List of districts with performance overall for the state
State Report of Schools	State	List of schools with performance overall for the state
District Report of Schools	District	List of schools with performance overall for a district
School Report of Students	School	Lists of all students who belonged to a school with their associated subject scores
Student Detail Report	Student	Detailed information about a selected student's performance in a specified subject



### 1.3.1 The Home Page

Once a user logged in, he or she was directed to the home page, which had two tabs for users to choose from: the Interactive Reports and the Participation Reports.

The Participation Report allowed teachers, principals, and district staff to view which students had not yet completed their tests. Users could select from a series of options to customize the group of students whose participation status was to be reviewed for a particular grade and subject, such as those who had started but had not completed their test or those who had not yet begun their test. Users could export the list into an Excel file and download the file. In addition, by clicking on the Participation Report tab, users could more easily access static aggregate reports.

State, district, and school users could access student performance reports for the FSA through the Interactive Reports tab. The *Home Page Dashboard* page in Figure 1 displays sample aggregation tables for each subject tested in the selected administration. The tables displayed the number of students tested and the mean T score by grade and also provided access to more detailed subject score reports. The columns constituting the aggregation tables were:

- **Number of Students** – This column displayed the count of students who took the test and had a reported score. The count included only students who had a score flag status of 1.
- **Mean T Score** – This column displayed the mean T score of students whose scores were reported for the selected grade.

Figure 1: Interactive Reports Home Page Screenshot

Number of Students and Mean T Score for Students in Demo District		
<b>ELA</b>		
Grade	Number of Students	Mean T Score
Grade 3	2,450	62
Grade 4	2,450	68
Grade 5	2,550	68
Grade 6	2,650	69
Grade 7	2,750	65
Grade 8	2,850	63
Grade 9	2,950	67
Grade 10	2,450	62
Grade 11	2,150	60
<b>Mathematics</b>		
Grade	Number of Students	Mean T Score
Grade 3	2,450	62
Grade 4	2,450	68
Grade 5	2,550	68
Grade 6	2,650	69
Grade 7	2,750	65
Grade 8	2,850	63

### 1.3.2 Subject Detail Page

When the user clicked any value displayed in Figure 1, the Subject Detail page opened (see Figure 2 below) with the chosen window of administration, subject, and grade.

Subject Detail Reports displayed overall student performance for the selected test. All data were based on the total number of students who had taken and completed the test, submitted it for scoring, and had a reported score (e.g., a score flag status of 1).

As shown in Figure 2 below, the Subject Detail Reports displayed the following data:

- **Name** – The name of the entity (district or school)
- **Number of Students** – Total count of students who took the test and had a score reported in the selected grade, subject, and administration
- **Mean T Score** – Mean T score of students tested in the selected grade, subject, and administration
- **Mean Linked Score** – Mean FSA Grade 10 ELA and Algebra 1 EOC scores were respectively linked to the 2014 FCAT 2.0 Grade 10 Reading and the Next Generation Sunshine State Standards (NGSSS) Algebra 1 assessment score scales.

Selecting the *Breakdown By* menu allowed the user to disaggregate the score data by a specific demographic subgroup category; for the 2015 test administration, the only available subgroup was Enrolled Grade.

*Figure 2: A Sample Subject Detail Report*

#### Student Performance in Demo District

*How did my district perform overall in FSA ELA?*

**Test:** Grade 10 FSA ELA  
**Administration:** Spring 2015  
**Name:** Demo District (99)

#### Mean T Score and Mean Linked Score Grade 10 FSA ELA Test for Students in Demo District

Breakdown By:

Name	Number of Students	Mean T Score	Mean Linked Score
State of Florida	225,000	62	254
Demo District (99)	2,450	62	254
Demo School 1 (99-0001)	500	68	256
Demo School 2 (99-0002)	60	69	257

### 1.3.3 Student Listing Report Page

The Student Listing Report, shown in Figure 3, displayed all the students in the selected school who had completed the selected test.

The Student Listing Report differed from the School Listing Report in several key ways:

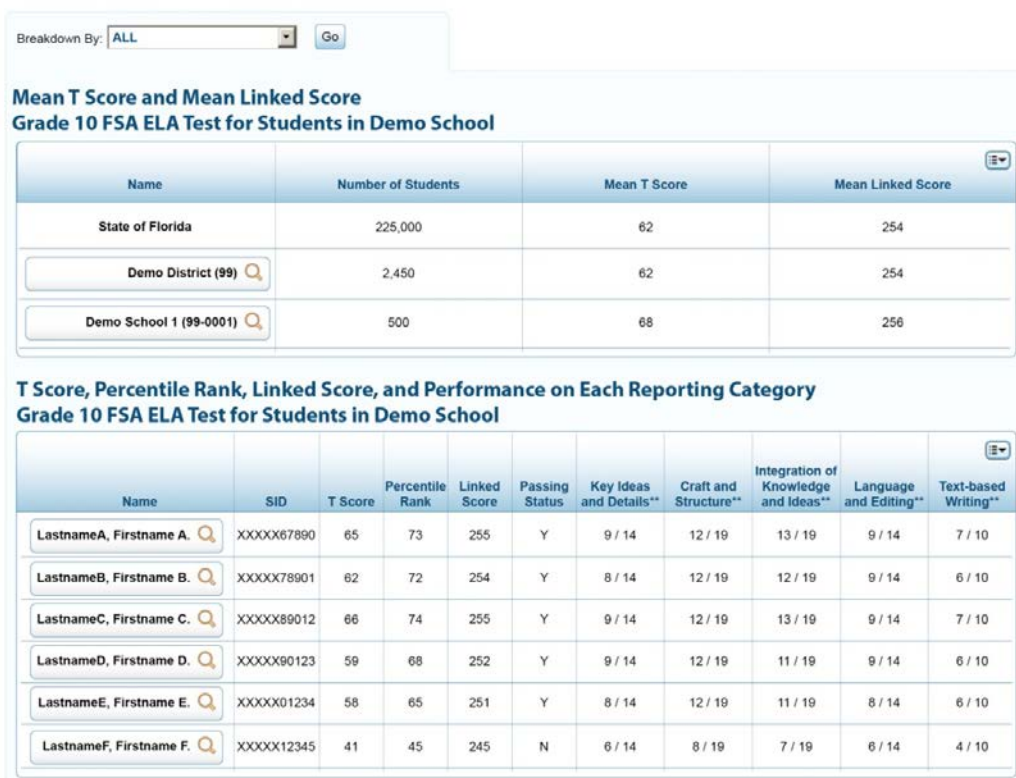
- The name of the report was *Summary of Overall Student Performance*.
- The students’ masked SID numbers were displayed.
- The scores were for individual students and were not mean scores.
- For students whose scores were “Not Reported” (NR), the Student Listing Report displayed only the student name, SID, and NR code.
- Additional columns, such as a student’s subject passing status, were displayed for specific subjects and grades.
- Reporting category scores could also be displayed for all students listed with a report status of “Reported.”

Figure 3: A Sample School Report of Students, Grade 10 ELA

#### Student Performance by Reporting Category

How did my students perform on the FSA ELA test?

Test: Grade 10 FSA ELA  
 Administration: Spring 2015  
 Name: Demo School (99-0001)



### 1.3.4 Individual Student Report Page

The Student Detail page presented detailed information on the performance of the student (see Figure 4 below) on a given assessment. This report displayed a student’s performance by reporting category and also included average scores for the state, district, and school for comparison purposes.

The *Student Test Performance* section displayed a student’s percentile rank and additionally showed passing status data for grade 10 ELA and Algebra 1. The *Reporting Categories* table displayed the student’s performance for each reporting category.

Figure 4: A Sample Individual Student Report, Grade 10 ELA

#### Individual Student Report

How did my student perform on the FSA ELA test?

**Test:** Grade 10 FSA ELA  
**Administration:** Spring 2015  
**Name:** Doe, John A.

Student Test Performance				
Name	SID	Birth Date	Percentile Rank	Passing Status
Doe, John A. 	XXXXX81721	01/30/1992	72	Y

Reporting Categories		
Reporting Category	Points Earned	Points Possible
Key Ideas and Details	13	14
Craft and Structure	16	19
Integration of Knowledge and Ideas	17	19
Language and Editing	11	14
Text-based Writing	8	10

### 1.3.5 State and District Reports of Results

The District Report of Schools, District Summary, State Report of Districts, State Report of Schools, and/or State Summary provided overall student performance for the selected test. The District Summary and State Summary Reports provided an overall performance across grades and subjects for the state or district. The District Report of Schools, State Report of Districts, and State Report of Schools provided an overall performance for the schools or districts by grade and subject. Figure 5 through Figure 9 display samples of these reports. These static reports were only found in the Reporting & Files section of the site.

In all reports, the number of students tested and the mean T Score were provided. The “Mean Linked Score” column appeared only on the FSA Grade 10 ELA and Algebra 1 EOC reports and indicated the mean score linked to the FCAT 2.0 or EOC score scale.

Figure 5: A Sample District Report of Schools, Grade 10 ELA

**District Report of Schools**

**Test:** Grade 10 FSA ELA  
**Administration:** Spring 2015  
**Name:** Demo District (99)

**Mean T Score and Mean Linked Score**  
**Grade 10 FSA ELA Test for Students in Demo District**

Name	Number of Students	Mean T Score	Mean Linked Score
State of Florida	225,000	62	245
Demo District (99)	6,108	62	245
Demo School 1 (99-0001)	500	50	242
Demo School 2 (99-0002)	650	55	247
Demo School 3 (99-0003)	575	66	258
Demo School 4 (99-0004)	673	63	255
Demo School 5 (99-0005)	475	54	246
Demo School 6 (99-0006)	600	54	246
Demo School 7 (99-0007)	550	70	262
Demo School 8 (99-0008)	630	73	263
Demo School 9 (99-0009)	625	60	252
Demo School 10 (99-0010)	450	66	258
Demo School 11 (99-0011)	380	70	262

Figure 6: A Sample District Summary

**District Summary Report**

**Test:** FSA ELA  
**Administration:** Spring 2015  
**Name:** Demo District (99)

**Mean T Score and Mean Linked Score**  
**FSA ELA Test for Students in Demo District**

**Grade 3**

Name	Number of Students	Mean T Score
Demo District (99)	2,450	50
State of Florida	225,000	55

**Grade 4**

Name	Number of Students	Mean T Score
Demo District (99)	2,450	66
State of Florida	213,400	63

**Grade 5**

Name	Number of Students	Mean T Score
Demo District (99)	2,550	54
State of Florida	201,550	54

**Grade 6**

Name	Number of Students	Mean T Score
Demo District (99)	2,650	54
State of Florida	214,650	54

**Grade 7**

Name	Number of Students	Mean T Score
Demo District (99)	2,750	60
State of Florida	218,750	66

**Grade 8**

Name	Number of Students	Mean T Score
Demo District (99)	2,850	50
State of Florida	230,850	55

**Grade 8**

Name	Number of Students	Mean T Score
Demo District (99)	2,950	66
State of Florida	229,950	63

**Grade 9**

Name	Number of Students	Mean T Score
Demo District (99)	2,950	66
State of Florida	229,950	63

**Grade 10**

Name	Number of Students	Mean T Score	Mean Linked Score
Demo District (99)	2,450	54	245
State of Florida	223,150	54	245

Figure 7: A Sample State Report of Districts

**State Report of Districts**

**Test:** Grade 10 FSA ELA  
**Administration:** Spring 2015  
**Name:** State of Florida

**Mean T Score and Mean Linked Score****Grade 10 FSA ELA Test for Students in State of Florida**

Name	Number of Students	Mean T Score	Mean Linked Score
State of Florida	225,000	62	245
Demo District 1 (01)	2,059	50	242
Demo District 2 (02)	1,892	55	247
Demo District 3 (03)	2,156	66	258
Demo District 4 (04)	1,773	63	255
Demo District 5 (05)	2,085	54	246
Demo District 6 (06)	868	54	246
Demo District 7 (07)	1,959	70	262
Demo District 8 (08)	2,152	73	263
Demo District 9 (09)	2,021	60	252
Demo District 10 (10)	725	66	258
Demo District 11 (11)	1,519	70	262

Figure 8: A Sample State Report of Schools

**State Report of Schools**

**Test:** Grade 10 FSA ELA  
**Administration:** Spring 2015  
**Name:** State of Florida

**Mean T Score and Mean Linked Score****Grade 10 FSA ELA Test for Students in State of Florida**

Name	Number of Students	Mean T Score	Mean Linked Score
State of Florida	225,000	62	245
Demo District 1 (01)	2,059	50	242
Demo School 1 (01-0001)	450	50	242
Demo School 2 (01-0002)	492	55	247
Demo School 3 (01-0003)	456	66	258
Demo School 4 (01-0004)	373	63	255
Demo School 5 (01-0005)	288	54	246
Demo District 2 (02)	1,892	55	246
Demo School 1 (02-0001)	659	50	262
Demo School 2 (02-0002)	692	55	263
Demo School 3 (02-0003)	541	66	252

Figure 9: A Sample State Summary

**State Summary Report**

**Test:** FSA ELA  
**Administration:** Spring 2015  
**Name:** State of Florida

**Mean T Score and Mean Linked Score****FSA ELA Test for Students in State of Florida****Grade 3**

Name	Number of Students	Mean T Score
State of Florida	225,000	55

**Grade 4**

Name	Number of Students	Mean T Score
State of Florida	213,400	63

**Grade 5**

Name	Number of Students	Mean T Score
State of Florida	201,550	54

**Grade 6**

Name	Number of Students	Mean T Score
State of Florida	214,650	73

**Grade 7**

Name	Number of Students	Mean T Score
State of Florida	218,750	66

**Grade 8**

Name	Number of Students	Mean T Score
State of Florida	230,850	55

**Grade 9**

Name	Number of Students	Mean T Score
State of Florida	229,950	63

**Grade 10**

Name	Number of Students	Mean T Score	Mean Linked Score
State of Florida	223,150	54	245

## 1.4 STUDENT REPORTS

Student Reports were delivered as printed materials to the districts, which then delivered those reports to schools. The primary purpose of the Student Report was to provide a document that enabled parents to understand their child’s performance in the subject in which he or she tested. The Student Report also presented information that indicated how a student’s performance compared to that of other students who took the same test.

The 2015 *FSA Student Report* was a two-page color report for all subjects, displayed in Figure 10 and in Appendix B. The first page provided general information about the FSA program and resources for students. The second page provided the student’s 2015 FSA results, including



reporting category scores and a description of each reporting category. The information on both of these pages was translated into Spanish and Haitian Creole.

Figure 10: A Sample FSA ELA Student Report

The image shows the English version of a student report for Doe, Jane, a 10th grader at Demo School. It includes a header with the Florida Standards Assessments logo, student information, and a title 'ELA Student Report'. The main body contains sections for 'Purpose of the Assessment and General Information', 'Propósito de la Evaluación y Información General', and 'Objektif Evalyasyon an ak Enfòmasyon Jeneral'. A 'Resources' section is at the bottom. A small table shows 'Reporting Categories' with points earned and possible.

The image shows the Spanish/Haitian Creole translation of the student report. It includes a header with the Florida Standards Assessments logo, student information, and a title 'Your Student's English Language Arts Score'. A bar chart shows a percentile rank of 78. Below the chart is a table of 'Reporting Categories' with points earned and possible. The bottom section contains three columns of text describing reporting categories in English, Spanish, and Haitian Creole.

- **Top of Report** – The test, student, school, and district were identified, along with the student identification information.
- **FSA Scores** – On the uppermost section of the second page, a student’s Percentile Rank was displayed graphically and further explained in an accompanying statement. This information was also translated into Spanish and Haitian Creole.
- **Reporting Category Scores** – In the middle of the second page, a table displayed the FSA ELA, Mathematics, or EOC reporting categories assessed. The “Points Earned” column showed the actual number of points earned in each of the reporting categories. The number of points earned is the sum of the scores of the items measuring a given reporting category. The “Points Possible” column provided the total number of points possible for each of the reporting categories. This information was not translated into Spanish and Haitian Creole.
- **Bottom of Report** – This section provided the description of each reporting category assessed. This information was translated into Spanish and Haitian Creole.

To better enable educators, parents/guardians, and students to understand FSA results and interpret them in a meaningful way, the Department published *Understanding FSA Reports*, which provided detailed information regarding the report types and results information contained therein. *Understanding FSA Reports* will be updated prior to the release of results each spring.

## **1.5 SHAREFILE AND FDOE SCORE RELEASE SYSTEM RELEASE**

Summer 2015 test results were released on the FDOE ShareFile and Score Release System. ShareFile is a secure file sharing site that allowed the K-12 FDOE Reporting team to upload student and summary results securely for districts and schools via PDF reports and data files. District Assessment Coordinators had access to the ShareFile site, and each district only had access to the test results for the students in their district. The following reports and data files were accessible for district download via the ShareFile with unique logins/passwords (one report/file for each subject tested):

- District Student Results (DSR) File
- District Aggregation Results (DAR) File
- State Aggregation Results (SAR) File
- State Summary (SS)
- State Report of Districts (SRD)
- District Report of Schools (DRS)
- School Reports of Students (SRS) for district

The FDOE Score Release User Guide is included in Appendix C of this volume.

The FDOE Score Release System is a static report site, created by the FDOE Web Development team. Users logged in with protected password information to retrieve PDF reports and Excel spreadsheets of the test results. The K-12 FDOE Reporting team was responsible for ensuring that all users obtained correct login information, as well as answering questions regarding site access. Both DACs and School Administrators had access to the FDOE Score Release System. For each test administration, the following PDF reports and associated Excel spreadsheets of the test results were accessible for district and school download via the secure FDOE Score Release System with unique logins/passwords (one report/spreadsheet for each subject tested):

- School Report of Students (SRS)
- State Summary (SS)
- State Report of Districts (SRD)
- District Report of Schools (DRS)

For the School Reports of Students, districts had access to both the SRS for the district and the SRS at the school level. Schools only had access to the SRS that contained test results for the students reported in their school. The Spring and Summer 2015 Late Reporting student results were also released on the ShareFile site and the FDOE Score Release System.

PDF reports that were posted to both the ShareFile site and the FDOE Score Release System included: School Report of Students (for SAs and DACs), School Report of Students for District (for DACs), State Summary, State Report of Districts, and District Report of Schools.

- **School Reports of Students** were rosters created from the approved State Student Results (SSR) files and provided on the Score Release System to districts and schools. These reports were created by subject for each school and included score flag status and scores (when score flag status was equal to 1) for all students in any given school. Students were not listed on the School Report of Students if their score flag status was 4 (where the PreID label did not match to TIDE for students testing on paper) or 0 (not tested). For the students assigned an NR (not reported) score status, footnotes on the bottom of each page of the reports explained the NR codes. For the ELA School Reports of Students, if no valid ELA score was reported for a student, the score flag status for ELA, Reading, and Writing were all presented on the report so that the district and school users could determine why there was no score reported for that student. For both initial and late reporting, one PDF report for each tested subject per school was posted in the Score Release System. Additionally, one combined PDF of all schools in a district was posted to the Score Release System for district access only. Reports created for late reporting did not include students from the initial reporting, and the file names for these PDF reports denoted that these documents only contained students for late reporting. These reports sorted student records first by ascending grade level, followed by Student Last Name, then First Name, and finally SID. For district-level reports, the records were sorted by school, then by grade, by Student Last Name, by First Name, and finally by SID. The fields for students' scores on School Reports of Students and Text Information are listed below.
  - Grade
  - District and School Names and Numbers
  - First and Last Name
  - SID
  - T-score, Percentile Rank
  - Linked Scale Score for the Assessment that had a linked score
  - Passing indicator for the Assessment that had a passing requirement
  - Performance Level
  - Passing Status for Algebra 1, Geometry, and Grade 10 ELA and ELA Retake
  - Number of Points Possible by subcategory
  - Raw score (points earned) by subcategory

Student names on each grade and subject for the School Reports of Students were sorted by Last Name, First Name, and SID.

The following reports were created exclusively for the initial release.

- **State Summary Reports** provided grade-level aggregated data for the State. One PDF per subject (Algebra 1, Algebra 2, Geometry, and Grade 10 ELA Retake) was posted to the Score Release System for school and district access. Excel spreadsheets containing the same information in a modified format accompanied the PDF files. PDFs were produced for the initial reporting only and created based on the approved SAR file. The basic variables of the State Summary are listed below:
  - Grade
  - District and School Names and Numbers
  - Number of Students reported

- Mean Scale Score
- Percentage Passing for the Assessments that had a passing requirement
- **State Reports of Districts** provided both district and state aggregated data. The report was generated by subject (Algebra 1, Algebra 2, Geometry, and Grade 10 ELA Retake) and contained the same data elements as the State Summary, but was ordered by district number. An Excel spreadsheet containing the same data was posted with the PDF file.
- **District Reports of Schools** provided aggregated data for the schools in a given district. For any given district, one PDF was generated per grade and subject (Algebra 1, Algebra 2, Geometry, ELA Retake), and was accompanied by an Excel spreadsheet. In these reports, the schools in the given district were sorted based on the school number. The same data elements that appeared on the State Summary Reports were provided in these files.

To make districts and schools aware of these releases, FDOE distributed information for each administration via email to School District Superintendents and District Assessment Coordinators on how to access both the ShareFile site and the FDOE Score Release System. Communication dates are listed below.

<b>Administration</b>	<b>Communication Date</b>
Spring 2015 Late Reporting	February 4, 2016
Summer 2015 EOC	November 2, 2015

## 2. CALCULATION OF STUDENT SCORES

This section provides an overview of the calculation of student scores. More detailed information can be found in Volume 1.

Note that the *population* in the subsections below refers to full population for grades 3 and 10 ELA and Algebra 1. The early processing sample (EPS) was used to establish norming groups for grades 4 through 9 ELA, grades 3 through 8 Mathematics, Algebra 2, and Geometry.

### 2.1 POINTS POSSIBLE

Students received a raw score for each reporting category, with scores being derived using only the operational items in each reporting category. The number of points earned is the sum of the scores of the items measuring a given reporting category. Raw scores were reported at the individual level and shown in the Points Earned column of the Student Reports.

### 2.2 THETA SCORE ESTIMATION

Student ability estimates, or theta scores, are generated using *pattern scoring*, a method which scores students differently depending on which items they answer correctly. Some test items provide more statistical information than other items, and when students answer those items correctly, it improves their ability estimate. Because the FSA tests are calibrated and scored based on the 3-parameter logistic model (3PL) and Generalized Partial Credit Models (GPCM) of Item Response Theory models, with the 2PL treated as a special case of the 3PL, two students with the same overall raw score but with correct answers to different questions may have slightly different ability estimates. Section 8.1.1 of Volume 1 outlines the formulas and rules applied during calculation.

Theta scores were not reported, but were used in the calculation of other scores.

### 2.3 T SCORES

T scores are standardized scores with a mean of 50 and standard deviation of 10. T scores, which are linear transformations of the theta scores previously described in Section 2.2, are calculated as follows:

$$T_i = \text{round}(\hat{\theta}_i * 10 + 50)$$

where  $\hat{\theta}_i$  is an individual student's ability estimate obtained from maximum likelihood estimation in AIR's scoring engine. T scores are rounded to the nearest whole number for reporting. Since all theta values are between -3 and 3, T scores fall between 20 and 80.

T scores were reported at the individual level in ORS and could be averaged at the state, district, or school level. Mean T scores were also reported at the aggregate level.

## 2.4 PERCENTILE RANK

Percentile rank is a norm-referenced score that describes how a student performs compared to other students in the population. Percentile ranks reported for the FSA were Florida-specific percentile ranks that described how students performed in the state relative to other Florida students who were administered the same test. Reported percentile ranks range from 1 to 99.

Percentile ranks were reported only at the individual student level, as it is not appropriate to average percentile ranks. At the state level, student performance was divided into quartiles, and data was reported to show the percentage of students—by school district and by school—who scored in each quartile.

## 2.5 LINKED SCORE

Grade 3 ELA, grade 10 ELA, and EOC Algebra 1 assessment results inform student-level decisions. . In order to report scores prior to standard setting, the new FSA scale was linked to the old FCAT 2.0 and NGSSS EOC scales, respectively, via equipercentile linking.

In grade 3 ELA, each student was assigned a status based on the percentile distribution of the T score. Students who were below the 20th percentile (i.e., the bottom quintile) of the T score distribution were identified. As established in House Bill 7069: “Students who score in the bottom quintile on the 2014-15 grade 3 English Language Arts assessment shall be identified as students at risk of retention. School districts must notify parents of such students, provide evidence as outlined in s. 1008.25(6)(b), and provide the appropriate intervention and support services for student success in grade 4.”

In grade 10 ELA and EOC Algebra 1, equipercentile linking of randomly equivalent groups was conducted. The objective of the equipercentile linking was to calculate the ability estimate for the  $i$ th student at percentile rank  $p$  on the FSA that corresponded to an FCAT 2.0 or EOC score at the same percentile rank given the observed distribution of scores from 2014.

More information about the methods used and results of the equipercentile linking can be found in Section 6.3 of Volume 1.

Linked scores were reported at the individual level and were averaged and reported at the state, district, and school level.

## 2.6 STANDARD ERRORS

A standard error is a statistic that measures the uncertainty associated with a student’s score. No test is perfectly reliable; therefore, a single test score does not perfectly capture any student’s performance. The standard error of a test score can be used to judge the degree to which a student would perform differently if he or she were to repeat the test administration. For example, if a student has a T score of 50 with a standard error of 5, then—applying properties of the normal distribution—68% of the time, one can expect a student to score between 45 and 55 on repeated testing administrations.

### **3. INTERPRETATION OF REPORTED SCORES**

The following business rules are applied for student scores in the ORS.

#### **3.1 BUSINESS RULES**

##### **3.1.1 Inclusion in Aggregation**

All interactive report data were based on the total number of students who took the test and had a reported score. Only students with a score flag status of 1 were included in this data; all other score flags were excluded from aggregation. Thus, students who completed but did not submit their tests for scoring or whose scores were suppressed were not included in the aggregated reports. Students whose scores were suppressed appeared on the School Report of Students with an NR (not reported) status.

##### **3.1.2 Aggregation**

Test data were collected at the individual student level during the testing period. Aggregations to a higher unit, such as a school or district, were calculated directly from the student level. More specifically, state, district, and school aggregates were calculated by aggregating all the students in the state, in the district, and in the school, respectively. For example, the average T score was based on the T scores of the students in their given district, rather than on the average T scores of each school in the district.

##### **3.1.3 Student Mobility Rules**

Scores were reported based on the enrolled school and district in TIDE as of May 19, 2015, for the Spring 2015 administration, if available. Otherwise, the last known school and district of the student was used.

##### **3.1.4 Minimum Group Size**

For all grades and subjects, no data were reported if fewer than 10 students were tested. Additionally, for grade 10 ELA and Algebra I, no data were reported if all students passed or if all students failed.

#### **3.2 INTERPRETATIONS**

This section provides guidance for appropriate interpretations and uses of test results.

##### **3.2.1 T scores and Percentile Rank**

As described above, both T scores and percentile ranks were reported for FSA ELA, Mathematics, and EOC tests because standard setting was not completed by the time scores were required to be reported. Students received a T score between 20 and 80 on the T score scale. On this scale, which is used only to report results for initial administrations, a score of approximately 50 is the statewide average, and all interpretations are norm-referenced interpretations. Students also received a percentile rank, which showed how they performed in each grade level (or subject area test, as

appropriate) compared to all other students in Florida who took the same test. The percentile rank was based on the student's T score.

T scores can be averaged to form overall summaries of student performance within a group. Percentile ranks, unlike T scores, are not typically averaged.

### **3.2.2 Linked Scores**

Students in grades 10 ELA and Algebra 1 received a linked score. A linked score represents a score at the same percentile rank on the FSA and FCAT 2.0. The performance cuts from the FCAT 2.0 and EOC were mapped to the FSA so that student-level decisions could be made using the linked scores. The Student Reports and School Report of Students contained a passing status (“Y” for yes and “N” for no). Student reports included a statement indicating whether the student met the graduation requirement.

### **3.2.3 Reporting Categories**

The Florida Department of Education encourages educators to use assessment results in a way that is statistically appropriate. The comparisons that are described here provide possibilities for evaluation of reporting category scores at the school and district levels.

Reporting category scores, also known as raw scores, are the totals of the scores on the items measuring each specific category. Reporting categories represent groups of student skills, or benchmarks, which are assessed in each grade and subject.

Raw scores, however, cannot be compared between the different reporting categories. For example, suppose a student has a raw score of 8 in one category and a raw score of 3 in another. This alone cannot be used to indicate that the student is relatively weak in the second reporting category vis-à-vis the first. The difficulty of the items must be considered, and raw scores do not factor in this information regarding item difficulty.



#### **4. CAVEON ANALYSIS**

After the testing window was closed, Caveon Test Security reviewed the data for testing irregularities, including student and school scores for anomalous data.

Possible examples of testing irregularities include a student copying another student's answers or a Test Administrator changing students' answers. Anomalous scores would have included (1) students with similar response patterns in the same testing group, (2) students with an unusual number of erasures from wrong to right answers, and (3) an unusual increase in school performance. The data forensic analyses detect potential security breaches using several statistics to detect the following:

- Pairs or groups of extremely similar or even identical answers;
- Aberrant response patterns, such as answering difficult items correctly and not providing correct answers for easy questions;
- Response time stamps, in the case of computer-based tests, to check whether a pair or a group of students worked in a synchronous manner;
- Unusual gain scores; and/or
- Numbers of wrong-to-right erasures on paper-pencil tests.

Through the results of these statistical analyses, it is possible to detect the source of suspect activity and its effect on test results. If an irregularity is found in the data, flagged student records are put on hold and noted on issue logs for FDOE review. FDOE reviews the data and can either request to release or continue the hold on the record.