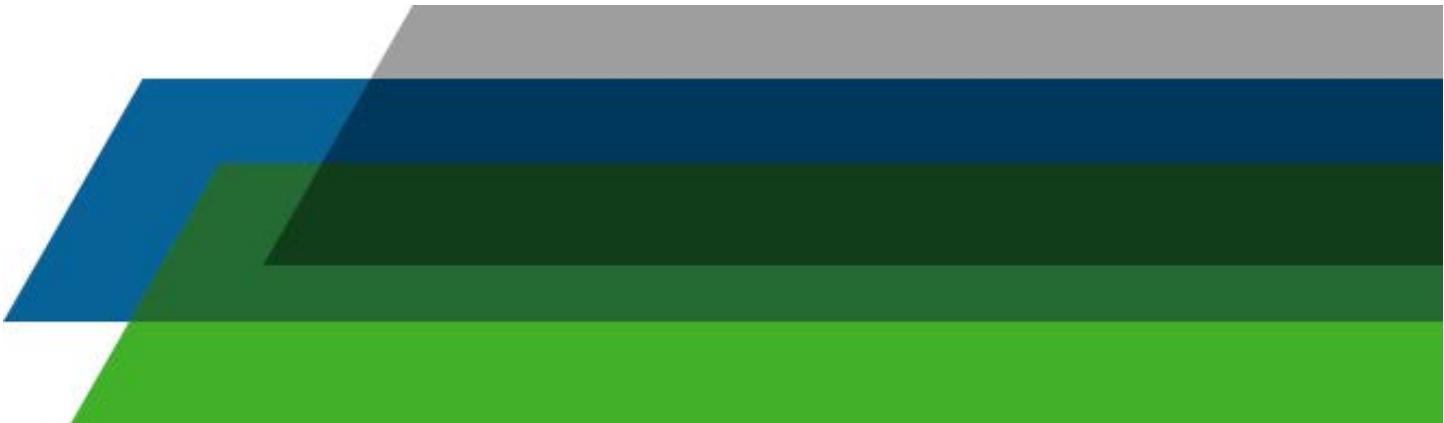




# Smarter Balanced Assessment Consortium: Reporting System

User Guide

Version 2.2  
Updated 03/29/2016





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# 1. Reporting System

## Overview

Amplify has created an innovative and intuitive reporting and data visualization platform that brings the criterion-referenced Smarter Balanced summative, interim comprehensive assessment, and interim assessment block outcomes data to life for teachers and administrators. Using this system, educators can view aggregates of student summative assessment result data at the state, district, school, and grade levels, and teachers with the correct levels of personally identifiable information (PII) access permissions can view Individual STUDENT Reports with summative and interim assessment results and share them with parents.

This section describes:

- Each report in detail
- Functional elements and the reports where they appear
- Terms and concepts that have specific definitions in the reporting context
- Technical requirements fulfilled by the reports
- How member states can further enhance the reporting platform
- Areas of ambiguity that have been clarified with the Consortium

Reporting is built upon the foundation of the individual student assessment. Each test record includes a scale score, a determination of which of four Achievement Levels that score signifies, information about the student, his or her school, and the test itself.

The reports that display individual student results communicate scores and Achievement Levels, but also explain their meaning by offering guidance on career- and college content-readiness through the “Achievement Level Descriptors” and “Report Information.” These reports also detail students’ achievement against grade-specific standards at more granular levels through the mathematics and ELA/literacy claims. Student reports can be downloaded for printing in batches, or individually, in multiple languages (English, Spanish, and Vietnamese) and either in grayscale or in full color.

The summative assessment aggregate reports build on the concept of overall subject Achievement Levels to display intuitive horizontal bar charts that characterize the proportion of students in each level. Each report provides search, sorting, filtering, comparison of selected aggregates, and alignment options to locate and review the aggregate data relevant to the users’ needs. For aggregate reports, users with appropriate permissions can download the data as displayed, as well as additional data extracts.

The first operational version of the reporting system is intended to provide a solid foundational reporting experience, focused on clear communication of straightforward information that is gathered through the administration of Smarter Balanced summative and interim assessments in ELA/literacy and mathematics. To that end, it provides broadly accessible, member-state common functionality that can be customized and enhanced in the future.

## Report Descriptions

The Smarter Balanced Reporting System is an interactive, online reporting platform that provides a range of reports on the Smarter Balanced summative and interim assessments. Reports provide aggregate score data at the state, district, school, and grade level. Educators may examine data at multiple levels, depending on their level of access, and can create custom subsets filtered by gender or student demographic data (e.g. LEP, Race/Ethnicity, IEP, Gender, 504, Economic Disadvantage, or Migrant Status), or based on the Completeness or validity of student test attempts. Aggregate reports can be viewed onscreen or downloaded as CSV files, and Individual STUDENT Reports can be downloaded as PDF files for easy printing and distribution to parents.

Student personally identifiable information (PII) is protected through the latest encryption and security technology, and users are only permitted to view data for students they have been explicitly authorized to view. Users without PII access are not permitted to view aggregates composed of fewer than 10 students or an aggregate of any size where all students are below proficient.

This document provides a static view of the reports, with annotations, previously approved by Smarter Balanced, provided to explain the different features that will be available when the system is released. Member States can utilize the system as hosted by the Consortium, utilize the open-source code to adapt the system to their needs, or utilize a different system.

The reports and extracts have been ordered in Section 2.1, and the table below provides a logical flow of information from the individual assessment result up to aggregate reporting.

Upon successful login, users enter the system at the Comparing Districts in a STATE level and can drill their way down through the aggregation hierarchy.

ID	Report Name
2.1.1	Individual STUDENT Report
2.1.1.1	Interim Assessment Block (IAB) Individual STUDENT Report
2.1.2	List of Students by Assessment GRADE
2.1.2.1	IAB List of Students by Assessment GRADE Report
2.1.3	Results by Grade for a SCHOOL
2.1.4	Comparing Schools in a DISTRICT
2.1.5	Comparing Districts in a STATE

Table 1 - List of Reports

### **1.1.1 Individual STUDENT Report**

This report presents individual student assessment scores and illustrates performance against grade-specific standards for a given summative or interim comprehensive assessment. The scores and descriptions provide context for understanding what the assessment has measured and how to interpret the scores and scoring categories. The report also provides information about the status of the student test attempts. If the scores are based on a partial test attempt by the student, or if the test was administered in non-regular/invalid conditions, the relevant information is provided on the report.

Educators, students, parents and guardians may use this report to understand a student's achievement, progress toward mastery of the Common Core State Standards and attainment of the academic knowledge and skills required to be college content- and career-ready. The report may provide context for a parent-teacher conference or, together with other instructional data, may help to identify areas for instructional focus.

A separate Individual STUDENT Report will be provided for each summative, each interim comprehensive assessment, and all interim assessment blocks that a student has taken. Data from different assessments (i.e., summative, interim comprehensive assessment) or from different years are not viewed together in one report; each report provides data for one assessment at a time.

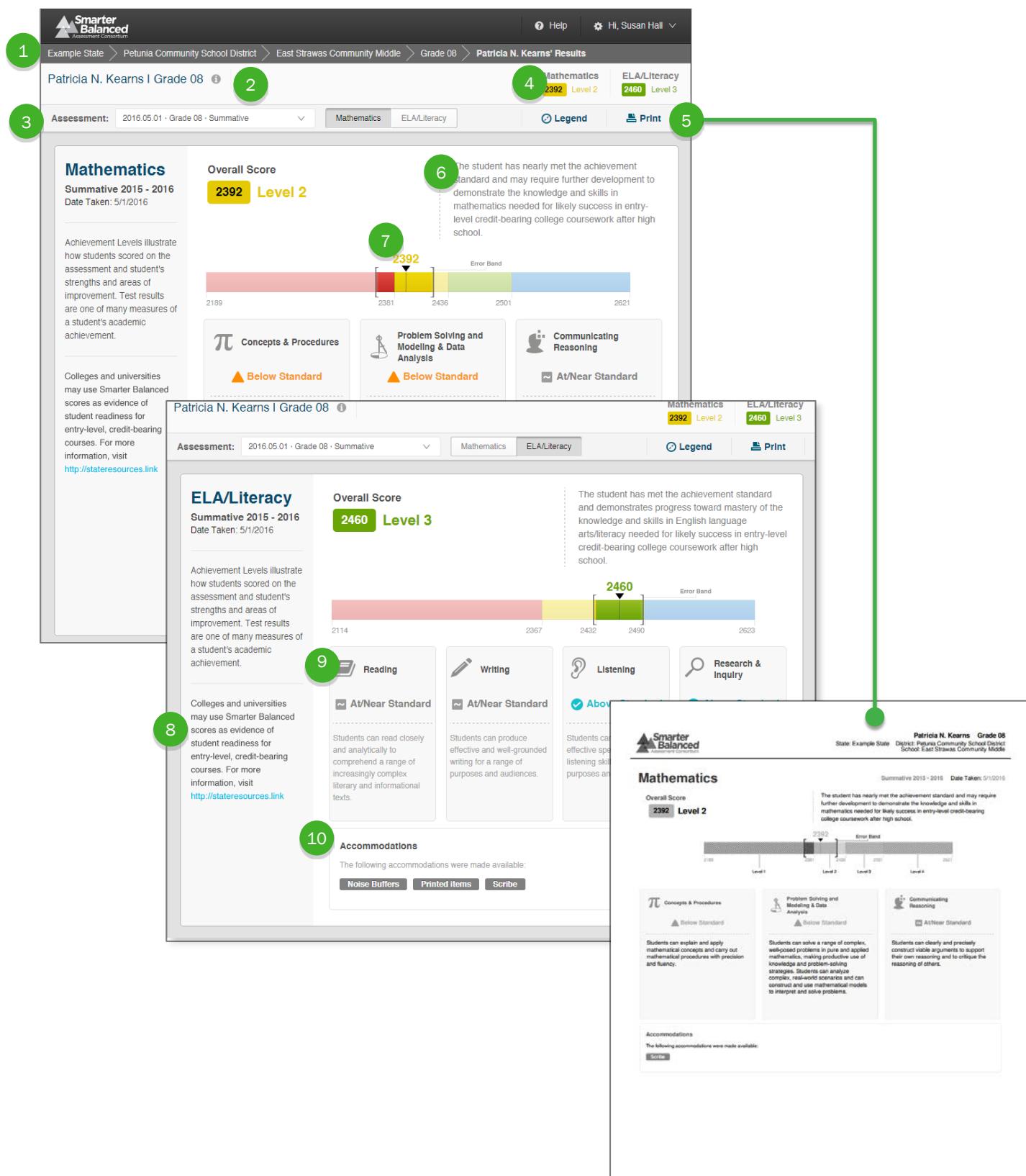


Figure 1 - Individual STUDENT Report

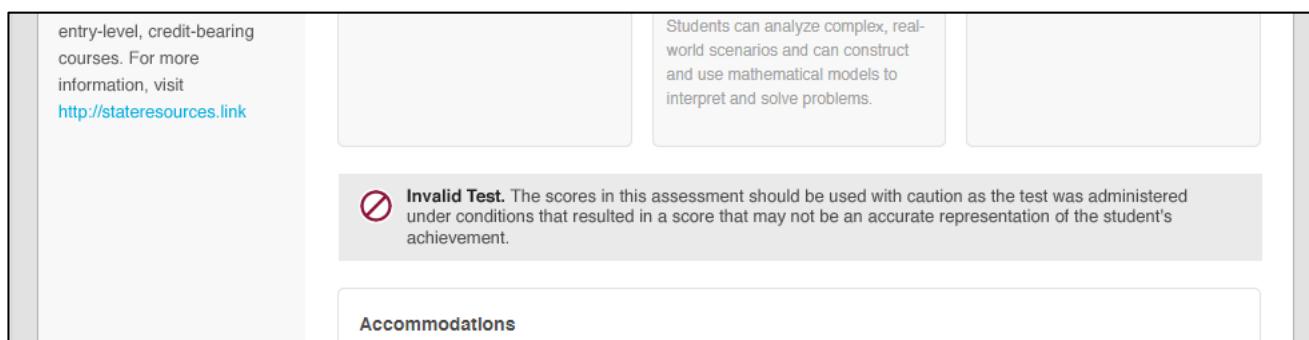
## Report Features

- 1 **Breadcrumbs:** At the top of the page, users can navigate back to the grade, school, district, and state level reports.
- 2 **Report Information:** Detailed report information regarding the report's purpose and its potential uses is accessible by pausing on or clicking the information icon next to the report's title.
- 3 **Assessment Selector:** A dropdown list of all assessments that the student has taken, organized by assessment type (summative or interim) and date administered.
- 4 **Top-Level Summary:** The student's mathematics and ELA/literacy overall scores and achievement level for the selected assessment (summative or interim).
- 5 **PDF Print:** The **Print** button presents the option of printing a PDF version of the report. Users can select either a grayscale (for black-and-white printing, set as default) or a full color version.
- 6 **Date Taken:** The date passed by the Test integration system in the \_\_\_\_\_ field is displayed as the date that the test was administered.
- 7 **Achievement Level Descriptor:** The description of the student's achievement level.
- 8 **Overall Score and Error Bands:** The overall score is indicated by a single number. This number is located visually along a continuum of scores. The score is surrounded by error bands, marked with brackets. This range indicates the range of scores that the student would be likely to achieve even if he or she took the test multiple times.
- 9 **College Content-Readiness Resources:** College and career readiness information for students in 11<sup>th</sup> grade. If available, a link to state-specific resources is provided.
- 10 **Claim Information:** Mathematics and ELA/literacy are composed of claims. Within each claim, student performance is reported as Below Standard, At/Near Standard, or Above Standard. A description of each claim is provided.
- 11 **Accommodations:** A list of accommodations made available to the student on the test.

entry-level, credit-bearing courses. For more information, visit <a href="http://stateresources.link">http://stateresources.link</a>		Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.	
<span style="color: red;">●</span> <b>Partial Test.</b> The student did not answer all questions on this test and all unanswered questions have been reported as incorrect.			
<b>Accommodations</b> <small>The following accommodations were made available:</small>			

11

Partial Icon: If the student did not attempt all the questions or items on a test, the score is based on a partial attempt.



entry-level, credit-bearing courses. For more information, visit <http://stateresources.link>

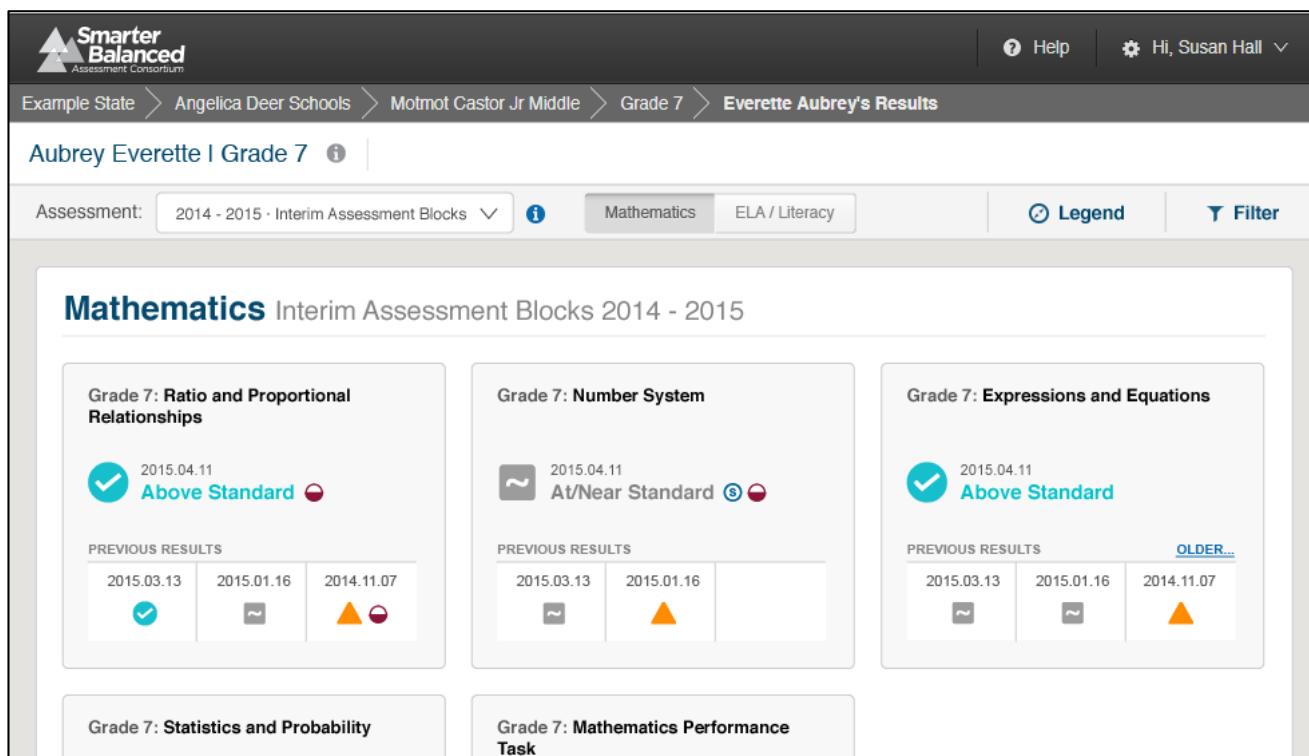
Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.

**Invalid Test.** The scores in this assessment should be used with caution as the test was administered under conditions that resulted in a score that may not be an accurate representation of the student's achievement.

**Accommodations**

12

Invalid Icon: This indicator is applied to Summative assessment results, if the conditions under which the student attempted a test deem the attempt as Invalid.



Example State > Angelica Deer Schools > Motmot Castor Jr Middle > Grade 7 > Everette Aubrey's Results

Aubrey Everette | Grade 7 i

Assessment: 2014 - 2015 · Interim Assessment Blocks i Mathematics ELA / Literacy Legend Filter

**Mathematics** Interim Assessment Blocks 2014 - 2015

Grade 7: Ratio and Proportional Relationships	Grade 7: Number System	Grade 7: Expressions and Equations
2015.04.11 <span style="color: #0070C0;">Above Standard</span> <span style="color: red;">✖</span>	2015.04.11 <span style="color: gray;">At/Near Standard</span> <span style="color: gray;">✖</span>	2015.04.11 <span style="color: #0070C0;">Above Standard</span> <span style="color: red;">✖</span>
PREVIOUS RESULTS 2015.03.13 <span style="color: green;">✓</span> 2015.01.16 <span style="color: gray;">~</span> 2014.11.07 <span style="color: orange;">▲</span>	PREVIOUS RESULTS 2015.03.13 <span style="color: gray;">~</span> 2015.01.16 <span style="color: orange;">▲</span>	PREVIOUS RESULTS 2015.03.13 <span style="color: gray;">~</span> 2015.01.16 <span style="color: gray;">~</span> 2014.11.07 <span style="color: orange;">▲</span>

**Grade 7: Statistics and Probability**

**Grade 7: Mathematics Performance Task**

13

Standard Icon: This indicator is applied to the Interim assessment results, if the conditions under which the student attempted a test are standardized

## Detailed Descriptions

### Navigation

- A user with appropriate permissions may access an Individual STUDENT Report by clicking a student's name in the List of Students by Assessment GRADE report.
- The Individual STUDENT Report displays results for one student on one assessment at a time. A user may navigate to other individual reports for this student via the Assessment Selector.
- A user may use the breadcrumbs to navigate up to the student's grade, school, district or state.

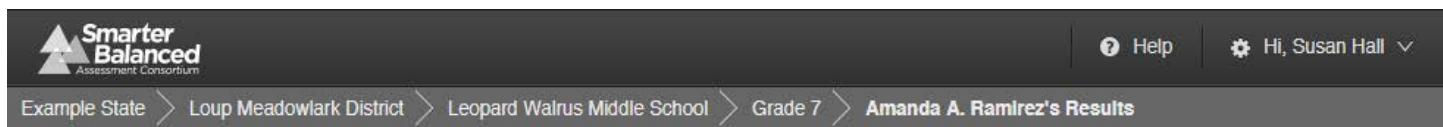


Figure 2 - Breadcrumb Navigation

### Informational Popup Windows

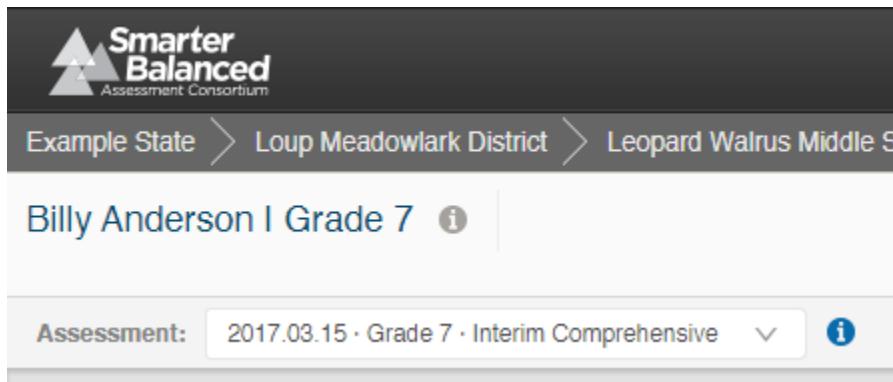
A screenshot of the Individual STUDENT Report page. At the top, it shows the Smarter Balanced Assessment Consortium logo and the breadcrumb navigation: "Example State" > "Loup Meadowlark District" > "Leopard Walrus Middle S". Below this, the student information "Billy Anderson | Grade 7" is displayed, with a small "i" icon indicating an informational popup. Further down, under the heading "Assessment:", there is a dropdown menu showing "2017.03.15 · Grade 7 · Interim Comprehensive" and another small "i" icon for an informational popup.

Figure 3 - Individual STUDENT Report Information Indicators

Report Information  and Interim Information  are available by pausing on or clicking the respective icons.

The Legend, Filter, and Align features must be clicked on to show the popup window.

The Report Information popup contains additional information about the purposes and proposed uses of the report. For the Individual STUDENT Report, the text is as follows:

**Purpose:**

This report presents individual student assessment scores and provides guidance on how to interpret the results.

**Uses:**

Educators, parents or students may use this report to understand student achievement, progress toward mastery of the Common Core State Standards and attainment of the academic knowledge and skills required to be college content- and career-ready.

**Understanding your score:**

The Smarter Balanced assessment is different than other tests with which you may be familiar.

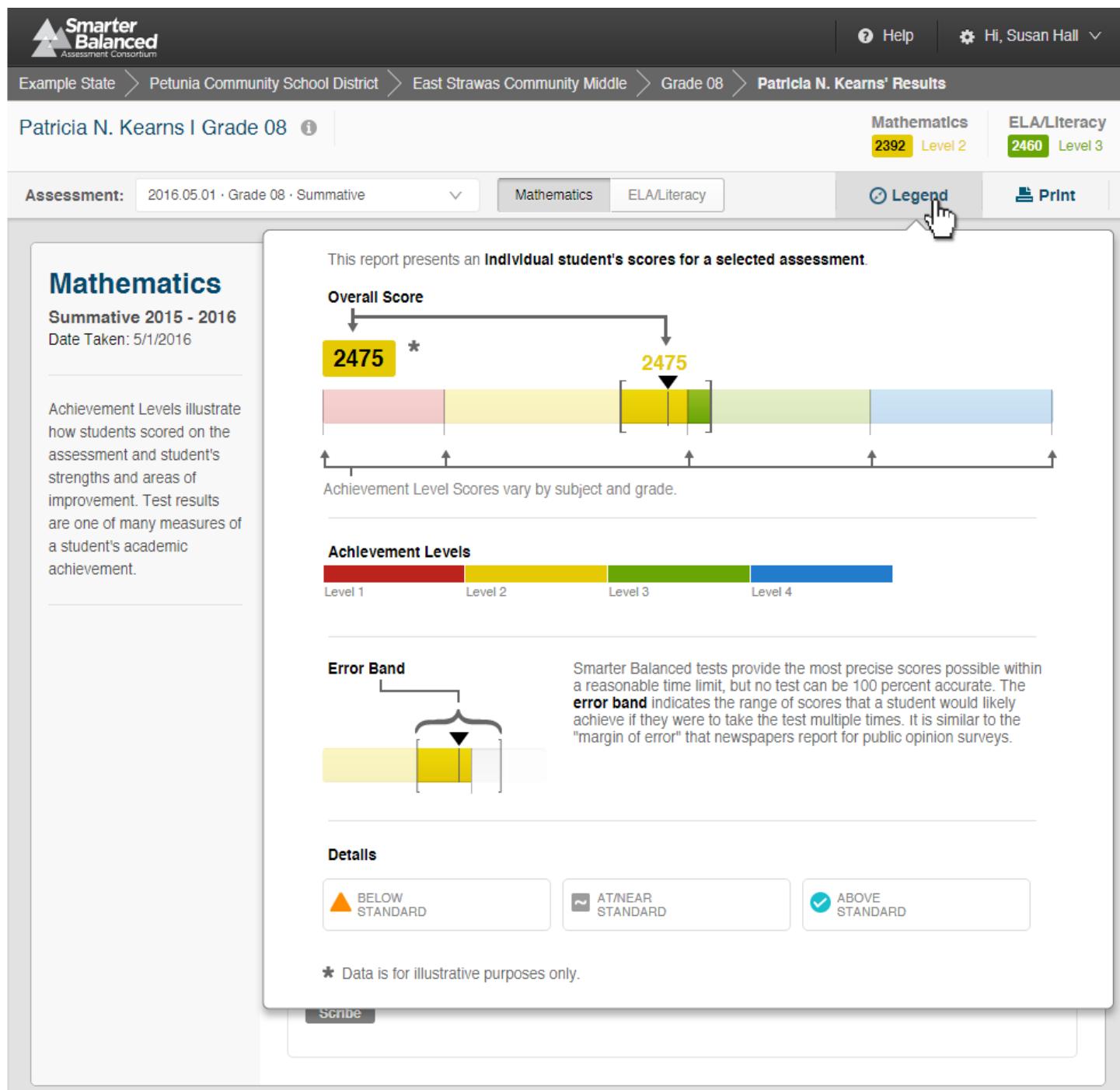
- First, the Smarter Balanced assessments are Computer Adaptive Tests and take advantage of technology to customize each test to the individual student. This means that when a student answers a question correctly, the next question they see will be slightly more difficult. Likewise, if an answer is incorrect, the next question will be somewhat less difficult. This procedure allows for more efficient and precise measurement of students' knowledge and skills.
- Second, the assessment is a criterion-referenced test, meaning that it reports individual students' understanding of a particular set of academic knowledge and skills. As a result, scores are not meant to compare students to each other, but rather to determine how well each student understands the content assessed.

The Interim Information popup contains specific information about the nature of the interim assessment and suggests appropriate ways to interpret interim results. The text is as follows:

**Important Information about Interim Assessments**

1. Interim assessments may be scored by local teachers. This scoring is not subject to the rigorous controls used in summative assessment and local results may show some variations.
2. Interim assessment questions are not secure. Exposure to, and familiarity, with, test questions may affect student performance and the accuracy of interim results.

The legend provides a key to the visual elements of the report. It appears as follows:



**Figure 4 - Individual STUDENT Report Legend**

The report legend could also include the indicators for Partial and Standardized, thus providing more information about the completeness and validity of the test attempt.

## Printing

Clicking the **Print** icon allows users to print a custom-designed, printer-friendly report in PDF format in color or grayscale. The printed report contains all visible content from the report as well as all content that is presented in popup windows.

## Score Displays

The top of the report displays mathematics and ELA/literacy overall scale scores and Achievement Levels for the assessment selected, whether summative or interim comprehensive.

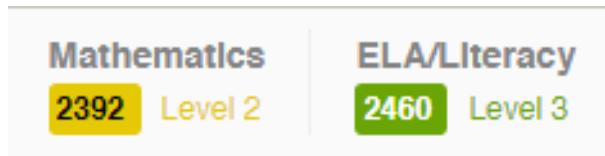


Figure 5 - Individual STUDENT Report - Overall Scores

Under each subject header, the report displays the student's overall score and Achievement Level on a colored band representing the range of possible scores and the achievement level scores. The Achievement Level is accompanied by an Achievement Level Descriptor (ALD). The student's score is represented by a number and a line marking a spot on the horizontal scale, surrounded by brackets indicating error bands. These error bands represent the range of scores a student might have received had they taken the test multiple times.

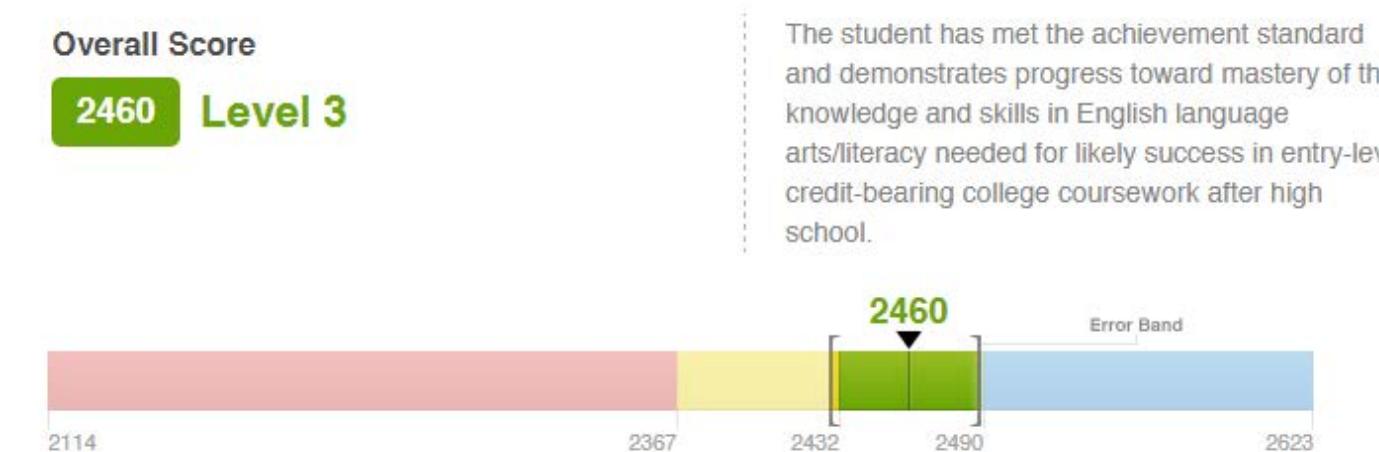


Figure 6 - Individual STUDENT Report Overall Score Bar

Below the overall score display, the report displays the student's Claim Level (Below Standard, At/Near Standard, Above Standard) for each of the subject's Claims, with descriptions of what each Claim measures and what performing at a specific Level indicates about a student's mastery of the standards.

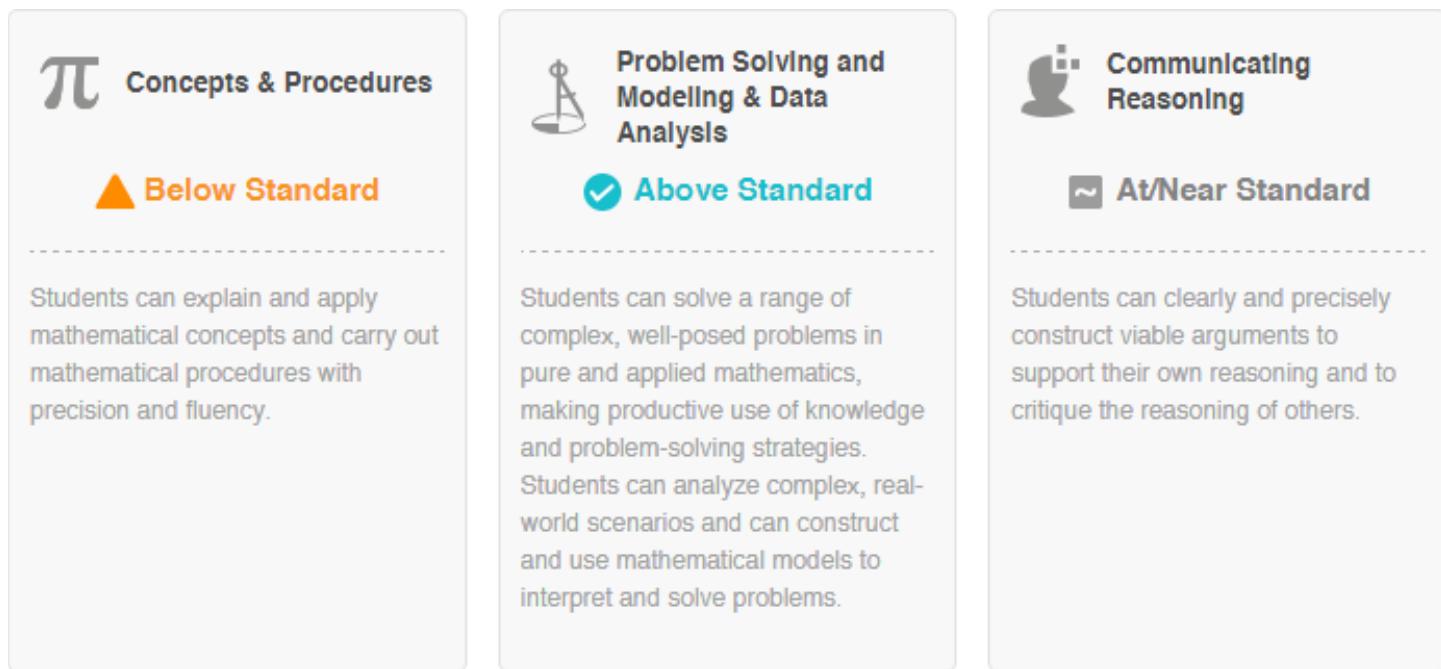


Figure 7 - Individual STUDENT Report Mathematics Claim Levels

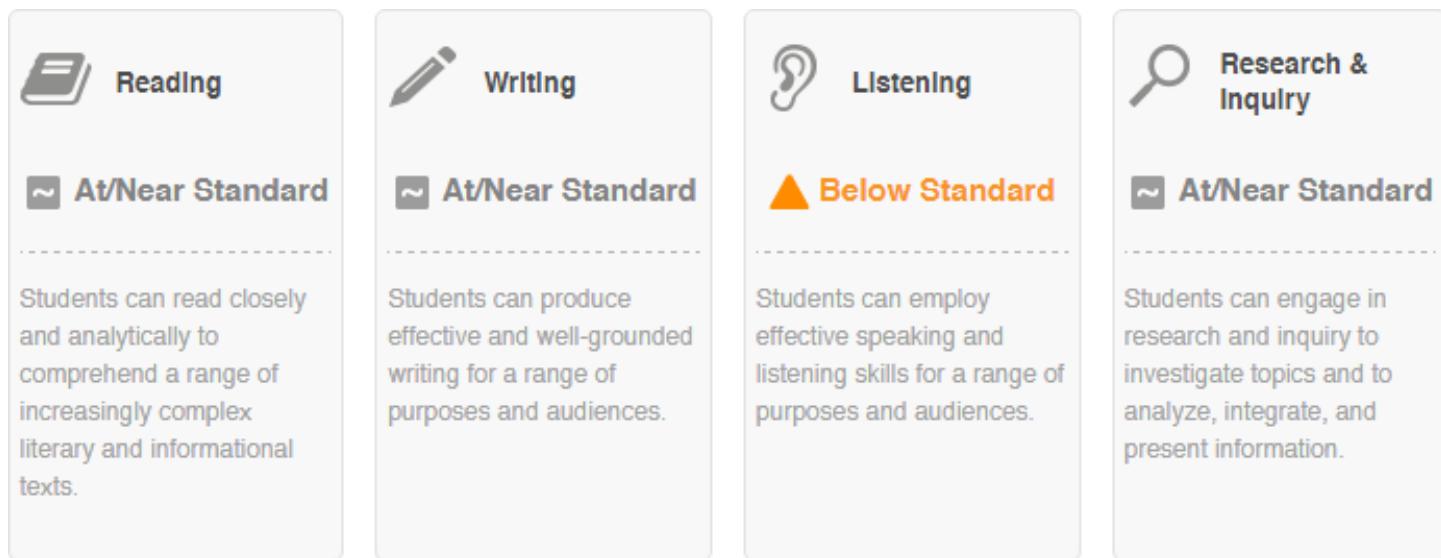


Figure 8 - Individual STUDENT Report ELA/Literacy Claim Levels

## Reported Accommodations

Where appropriate, the report displays any Accommodations that were made available to the student:

### Accommodations

The following accommodations were made available:

**Alternative Response**

**American Sign Language**

**Closed Captioning**

**Scribe**

**Streamline Mode**

**Figure 9 - Individual STUDENT Report Accommodations Reporting**

The eligibility, availability, and usage of an accommodation are subject to the capabilities of the Test Delivery System and information captured by the proctor at test time. If this information is not captured at test time, then it will not be displayed by the reporting system.

### Appropriate Uses Message

The report displays a consortium-level message about the state of the scores reported and provides guidance to educators on how to interpret the report. The text reads as follows:

Achievement Levels illustrate how students scored on the assessment and student's strengths and areas of improvement. Test results are one of many measures of a student's academic achievement.

## College Content-Readiness Resources

Reports for students' 11th grade assessments display Consortium-common policy information, with a state-configurable link to state resources. The text reads as follows:

Colleges and universities may use Smarter Balanced scores as evidence of student readiness for entry-level, credit-bearing courses. For more information, visit [STATE-SPECIFIC LINK].

## Language Support

The textual content of the Reporting System is available for viewing and printing in English by default, but users can select to view or print the content in either Spanish or Vietnamese.

## Student Privacy

This report contains student personally identifiable information (PII). Therefore, only users with authorization and system permissions to access PII for this student can view this report. Authorization and permissions are set by each state and passed to the Reporting System when a user logs in to the system.

- 1) In order to see a given Individual STUDENT Report, a user must meet these three requirements:
  - o Have appropriate external authorization to access PII
  - o Be authenticated through the Smarter Balanced operational Single Sign-On component
  - o Have appropriate permissions for that student assigned to their user account through the Smarter Balanced Permissions component
- 2) The Smarter Balanced Single Sign-On component does not contain accounts, user names or passwords for students or parents, but contains accounts with user names and passwords for registered educators and administrators. This means that parents and students cannot access the report online directly through the Consortium system, but rather mediated either by their educator/administrator or in printed form.
- 3) Provisioning of the Individual STUDENT Report in printer-friendly format (in either the default gray-scale or in full color) allows for offline/paper-based dissemination of the report by schools to parents.
- 4) The Individual STUDENT Report can be generated by an external system through an Application Programming Interface (API). States can configure systems to call the Smarter Balanced system and generate student reports on behalf of their educators. Any system that wanted to generate a student report would need the same authorizations and permissions as an individual user.
- 5) For parents and students to be able to see this report online via a state-operated reporting system, the state needs to integrate with the Smarter Balanced Single Sign-On component in order to authenticate their user accounts, verify their permissions, and provide their users with access.
- 6) The data that drive Individual STUDENT Reports—including Overall (scale score, error band, and achievement level) and Claim (scale score, error band, and claim level) data—are calculated by the Test Integration component and passed to the Data Warehouse. Neither the Reporting System nor the Data Warehouse calculate or compute scores, error bands, or performance levels.

#### **1.1.1.1 Interim Assessment Block (IAB) Individual STUDENT Report**

An Interim Assessment Block (IAB) is administered and scored locally and reported as an individual result, even if several blocks are assessed in one sitting. Blocks are designed on a per-grade basis, and the list of blocks is available from Smarter Balanced in the [Interim Assessment Statement of Purpose](#).

Reporting for Interim Assessment Blocks is focused on communicating the block-level results for a List of Students by Assessment GRADE, and for individual student reporting. Like Interim Comprehensive reports, IAB results are not aggregated. As IABs are locally scored, educators will see individual student responses through the Scoring component.

The Individual STUDENT Report presents individual student assessment scores for a given interim block assessment. The scores and descriptions provide context for understanding what the assessment has measured and how to interpret the scores and scoring categories.

Educators, students, parents and guardians may use this report to understand a student's achievement, progress toward mastery of the Common Core State Standards and attainment of the academic knowledge and skills required to be college content- and career-ready. The report may provide context for a parent-teacher conference or, together with other instructional data, may help to identify areas for instructional focus.

A single Individual STUDENT Report is provided for all the interim block assessments that a student has taken in a given academic year.

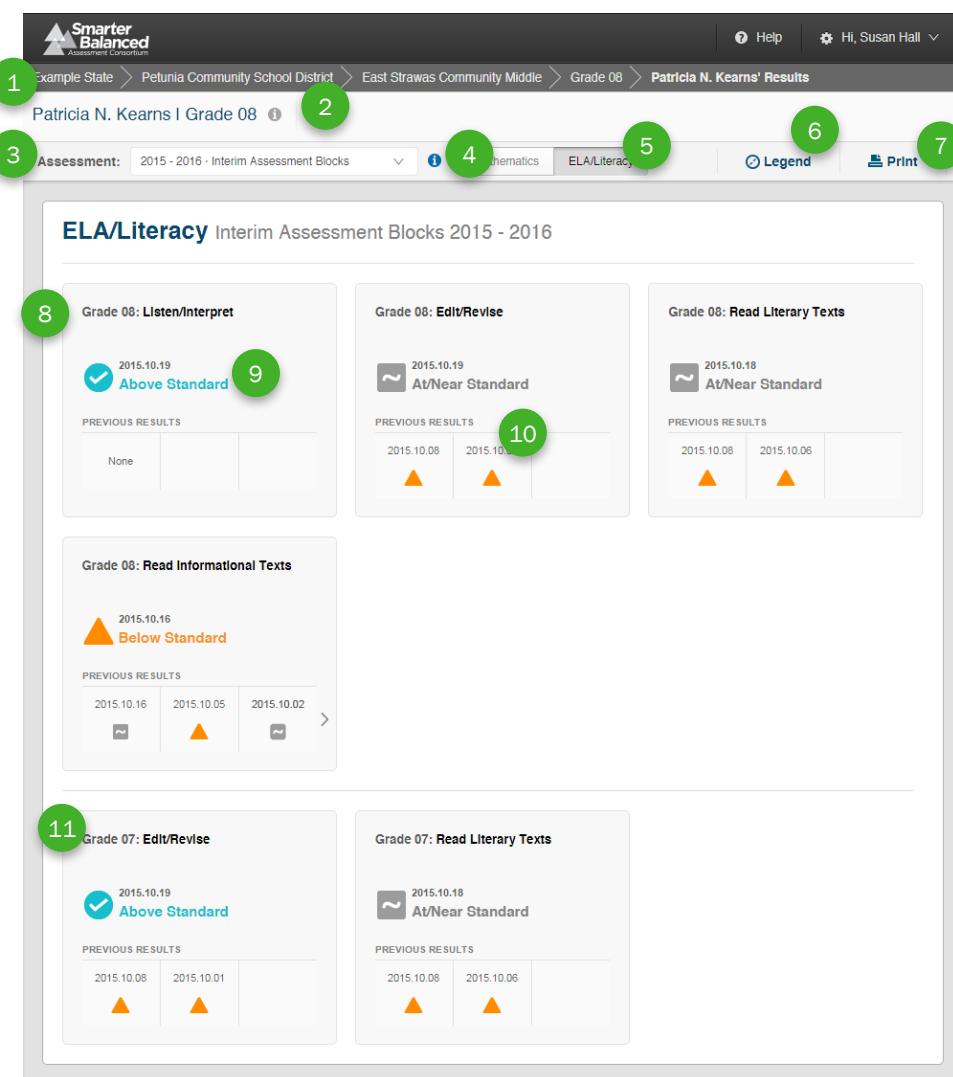


Figure 10 – IAB Individual Student Report

## Report Features

- 1 **Breadcrumb:** At the top of the page, users can navigate back to the Grade, School, District, and State level reports.
- 2 **Report Information:** Detailed report information regarding the report's purpose and its potential uses is accessible by pausing on or clicking the  information icon next to the report's title.
- 3 **Assessment / Academic Year Selector:** A drop-down list of all assessments that the students have taken, organized by assessment type (Summative or Interim Comprehensive) and date administered. Drop-down also allows selection of other academic years for which there is available assessment data.
- 4 **Interim Report Information:** Important information from Smarter Balanced on the qualification of interim results.

**Subject Selector:** Used to switch views between mathematics and ELA/literacy

5

**Legend:** The Legend provides a resource that describes the visual elements and concepts present on the report.

6

**PDF Print:** The Print button presents the option of printing a PDF version of the report. Users can select various print settings, including color, grayscale (for black-and-white printing), and language.

7

**Interim Assessment Block Title:** Displays the grade for which the block was designed, and the block title.

8

**Interim Assessment Block Score Level:** Displays an icon and label for the achievement level determination of the most recent assessment of that block.

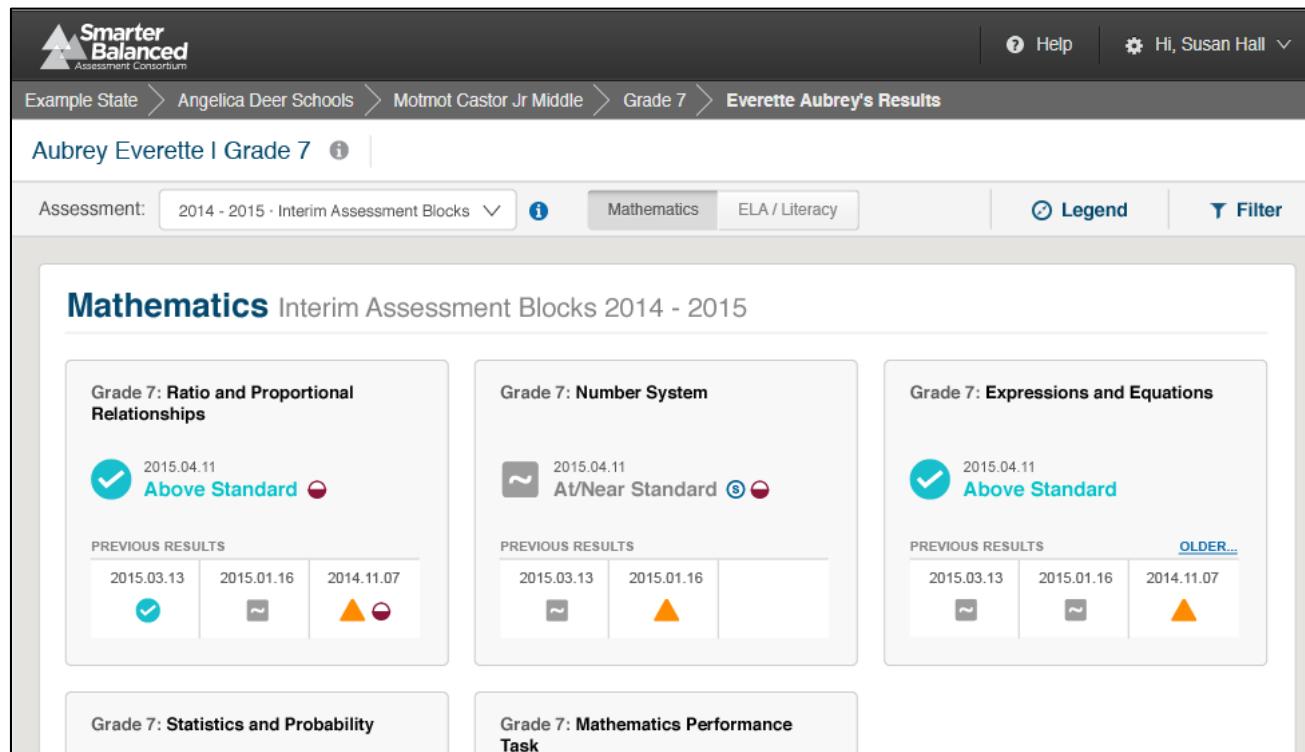
9

**Interim Assessment Block Administration Information:** Displays additional information on up to three administrations of that block with the latest to the left. In the unlikely case of more than three administrations of a block, a scrolling control will be evident.

10

**Off-Grade Interim Assessment Block Administrations:** As a student may take blocks designed for grades other than their currently enrolled grade, the ISR for IAB includes off-grade assessments below a dividing line for clarity, and includes the Grade level of the block in the block title.

11



The screenshot shows the Smarter Balanced Reporting System interface. At the top, there's a navigation bar with the Smarter Balanced logo, a Help link, and a user profile for "Hi, Susan Hall". Below the navigation bar, the URL path is shown: Example State > Angelica Deer Schools > Motmot Castor Jr Middle > Grade 7 > Everette Aubrey's Results. A search bar below the path contains "Aubrey Everette | Grade 7". The main content area is titled "Mathematics Interim Assessment Blocks 2014 - 2015". It displays four achievement levels in cards:

- Grade 7: Ratio and Proportional Relationships**: Status: Above Standard (green checkmark). Previous results: 2015.03.13 (green checkmark), 2015.01.16 (gray question mark), 2014.11.07 (orange triangle with red exclamation mark).
- Grade 7: Number System**: Status: At/Near Standard (gray question mark). Previous results: 2015.03.13 (gray question mark), 2015.01.16 (orange triangle), 2014.11.07 (orange triangle with red exclamation mark).
- Grade 7: Expressions and Equations**: Status: Above Standard (green checkmark). Previous results: 2015.03.13 (gray question mark), 2015.01.16 (gray question mark), 2014.11.07 (orange triangle).
- Grade 7: Statistics and Probability**: Status: Not Yet Standard (gray question mark). Previous results: 2015.03.13 (gray question mark), 2015.01.16 (gray question mark), 2014.11.07 (orange triangle).
- Grade 7: Mathematics Performance Task**: Status: Not Yet Standard (gray question mark). Previous results: 2015.03.13 (gray question mark), 2015.01.16 (gray question mark), 2014.11.07 (orange triangle).

12 Partial Icon: If the student did not attempt all the questions or items on a test, the score is based on a

partial attempt.

- 13 Standard Icon: This indicator is applied to the Interim assessments results, if the conditions under which the student attempted a test are standardized

## Detailed Descriptions

### Navigation

- A user with appropriate permissions may access an Individual STUDENT Report for IAB by clicking a student's name in the List of Students by Assessment GRADE report and selecting Interim Assessment Blocks from the Assessment Selector.
- The Individual STUDENT Report displays all Interim Assessment Block results for one student for one academic year. A user may navigate to other IAB individual reports for this student by selecting other academic years in the Assessment Selector.
- A user may use the breadcrumb to navigate up to the student's grade, school, district or state.



Figure 11 - Breadcrumb navigation

### Printing

Clicking the **Print** icon  allows you to print a custom-designed, printer-friendly report in PDF format in color or grayscale. The printed report contains all visible content from the report as well as all content that is presented in popup windows.



State: North Carolina

 Thomas Smith    Grade 7  
 Daybreak School District  
 School: Western Middle

## Mathematics

Interim Assessment Blocks 2014 - 2015

### Grade 7: Ratio and Proportional Relationships

2015.04.11  
**Above Standard**

## PREVIOUS RESULTS

2015.03.13	2015.01.16	2014.11.07

### Grade 7: Number System

2015.04.11  
 At/Near Standard

## PREVIOUS RESULTS

2015.03.13	2015.01.16	

### Grade 7: Expressions and Equations

2015.04.11  
**Above Standard**

## PREVIOUS RESULTS (more dates online)

2015.03.13	2015.01.16	2014.11.07

### Grade 7: Statistics and Probability

2015.04.11  
 At/Near Standard

## PREVIOUS RESULTS

None		
------	--	--

### Grade 7: Mathematics Performance Task

2015.04.11  
**Below Standard**

## PREVIOUS RESULTS

2015.03.13		

### Grade 6: Number System

2015.04.11  
**Above Standard**

## PREVIOUS RESULTS

2015.03.13		

### Grade 6: Statistics and Probability

2015.04.11  
 At/Near Standard

## PREVIOUS RESULTS

None		
------	--	--

Figure 12 - Print layout for IAB, Individual STUDENT Report, Mathematics (1 of 3)

State: North Carolina      Thomas Smith      Grade 7  
Daybreak School District      School: Western Middle

## ELA/Literacy

Interim Assessment Blocks 2014 - 2015

<b>Grade 7: Read Literary Texts</b>   2015.04.11 At/Near Standard  PREVIOUS RESULTS <table border="1"> <tr> <td>None</td> <td></td> <td></td> </tr> </table>	None			<b>Grade 7: Brief Writes</b>   2015.04.11 Below Standard  PREVIOUS RESULTS <table border="1"> <tr> <td>2015.03.13</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	2015.03.13						<b>Grade 7: Explanatory Performance Task</b>   2015.04.11 Above Standard  PREVIOUS RESULTS <table border="1"> <tr> <td>2015.03.13</td> <td>2015.03.13</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	2015.03.13	2015.03.13				
None																	
2015.03.13																	
																	
2015.03.13	2015.03.13																
																	

<b>Grade 6: Research</b>   2015.04.11 Above Standard  PREVIOUS RESULTS <table border="1"> <tr> <td>2015.03.13</td> <td>2015.03.13</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	2015.03.13	2015.03.13				
2015.03.13	2015.03.13					
						

Page 2 of 3

Figure 13 - Print layout for IAB, Individual STUDENT Report, ELA/Literacy (2 of 3)



State: North Carolina

**Thomas Smith    Grade 7**  
Daybreak School District  
School: Western Middle

### Report Info:

#### Purpose:

This report presents individual student assessment scores and provides guidance on how to interpret the results.

#### Uses:

- Educators, parents or students may use this report to understand student achievement, progress toward mastery of the Common Core State Standards and attainment of the academic knowledge and skills required to be college content- and career-ready.

#### Understanding your score:

The Smarter Balanced assessment is different than other tests with which you may be familiar.

- First, the Smarter Balanced assessments are Computer Adaptive Tests and take advantage of technology to customize each test to the individual student. This means that when a student answers a question correctly, the next question they see will be slightly more difficult. Likewise, if an answer is incorrect, the next question will be somewhat less difficult. This procedure allows for more efficient and precise measurement of students' knowledge and skills.
- Second, the assessment is a criterion-referenced test, meaning that it reports individual students' understanding of a particular set of academic knowledge and skills. As a result, scores are not meant to compare students to each other, but rather to determine how well each student understands the content assessed.

### Legend



**BELOW STANDARD**

Your test results clearly show that you have not yet met the standard in this subject-area for your grade.



**AT/NEAR STANDARD**

Your test results may be just above or just below the standard, but due to the error band (see above), the result is too close to call.



**ABOVE STANDARD**

Your test results clearly show that you understand and are able to apply your knowledge to the standards in this subject-area of your grade.

Figure 14 - Print layout for IAB, Individual STUDENT Report, Report Info (3 of 3)

## Score Displays

Each Interim Assessment Block result is displayed in a tile.

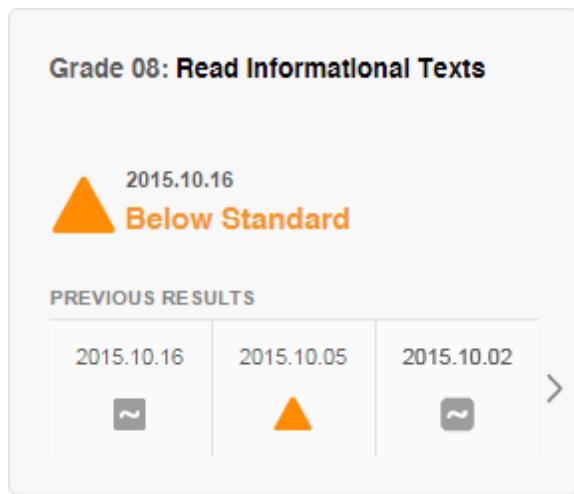


Figure 15 - Interim Assessment Block Results Tile

Each tile contains the following elements:

- **Title** – The title contains the grade of the assessment and the title of the assessment block.
- **Score Level** – Student results are represented as either: “Below Standard,” “At/Near Standard,” or “Above Standard.” The score displayed will be the most recent score received on this assessment block.
- **Record of Administrations** – For each administration of this assessment block, the report will display the date administered and the result received. The records are displayed in reverse chronological order, with the most recent administration appearing on the left.
- **Scroll arrow** – If this assessment block has been administered more than three times, an arrow will appear allowing users to scroll to see older results.

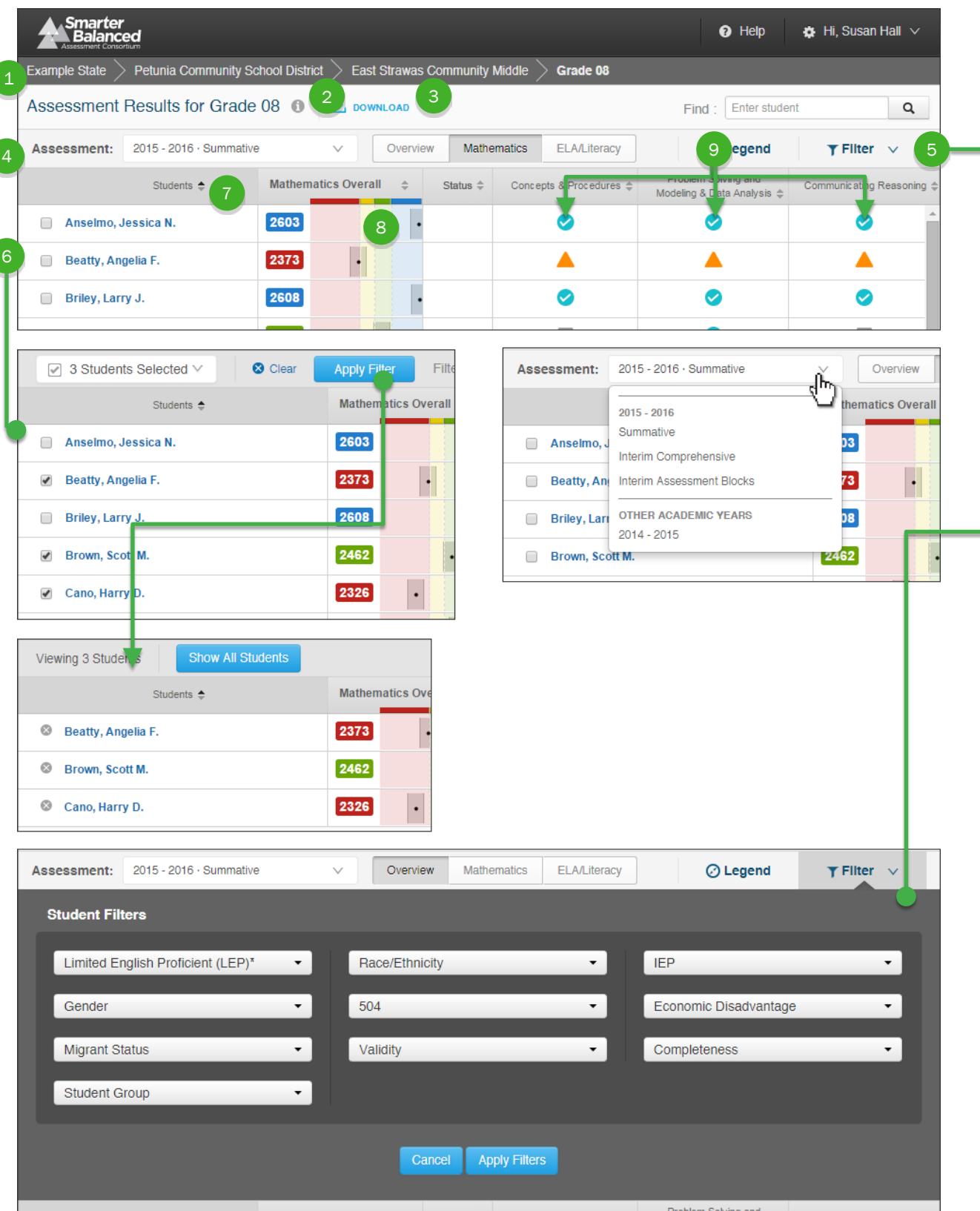
In the event that a student is assessed with interim assessment blocks from a grade other than their current grade, the results from the out-of-grade assessments will appear after the ones from their current grade.

### **1.1.2 List of Students by Assessment GRADE**

This report provides assessment results for a list of students. The list is generated based on data available on results for summative or interim comprehensive assessments designed for the selected grade and taken during the selected Academic Year.

The list can be viewed either with mathematics and ELA/literacy side by side, or in a subject detail view that shows Overall scale scores complemented by Claim Levels (see Section 2.5.5 for more information on Claim Levels). The status column on the list provides information about the completeness or validity of the student test attempt.

This list does not represent enrollment-based classes or sections, as there are no persistent teacher-student links in the Data Warehouse. However, students in the list can be filtered, sorted, and selected to assist in narrowing focus. Filters are provided using all demographic and program data available, as well as student groups that may be used as desired by member states. The list can be sorted in ascending or descending order by the values in any column (e.g., alphabetically by last name or numerically by overall scale scores).



The screenshot illustrates the Smarter Balanced Reporting System interface, specifically the 'Assessment Results for Grade 08' section. The interface includes the following components and annotations:

- Header:** Shows the navigation path: Example State > Petunia Community School District > East Strawas Community Middle > Grade 08.
- Toolbar:** Includes a 'Help' link, a user profile for 'Hi, Susan Hall', and a search bar labeled 'Find : Enter student'.
- Main Content:** A table showing student scores across various categories. The columns include Students, Mathematics Overall, Status, Concepts & Procedures, Problem Solving and Modeling & Data Analysis, and Communicating Reasoning.
- Annotations:**
  - 1:** Circles the navigation path in the header.
  - 2:** Circles the 'DOWNLOAD' button in the toolbar.
  - 3:** Circles the search bar in the toolbar.
  - 4:** Circles the 'Assessment' dropdown menu.
  - 5:** Circles the 'Filter' button in the top right.
  - 6:** Circles the 'Students' column header in the main table.
  - 7:** Circles the 'Mathematics Overall' column header in the main table.
  - 8:** Circles the 'Status' column header in the main table.
  - 9:** Circles the 'Concepts & Procedures' column header in the main table.
- Modals and Popups:**
  - A modal titled '3 Students Selected' shows a list of selected students: Anselmo, Jessica N. (score 2603), Beatty, Angelia F. (score 2373), and Briley, Larry J. (score 2608). It includes 'Clear' and 'Apply Filter' buttons.
  - A dropdown menu from the 'Assessment' dropdown shows options: 2015 - 2016 (Summative, Interim Comprehensive, Interim Assessment Blocks), OTHER ACADEMIC YEARS (2014 - 2015), and a '2014 - 2015' option.
  - A modal titled 'Student Filters' allows filtering by LEP status, gender, race/ethnicity, IEP status, economic disadvantage, migrant status, validity, completeness, and student group. It includes 'Cancel' and 'Apply Filters' buttons.
- Buttons and Labels:**
  - 'Viewing 3 Students' label above the filtered student list.
  - 'Show All Students' button in the filtered student list.
  - 'Overview', 'Mathematics', and 'ELA/Literacy' tabs in the top navigation.
  - 'Legend' button in the top right.
  - 'Filter' button in the top right.

Figure 16 - List of Students by Assessment GRADE

## Report Features

- 1 **Breadcrumbs:** At the top of the page, users can navigate back to the school, district, and state level reports.
- 2 **Report Information:** Detailed report information regarding the report's purpose and its prospective uses is accessible by pausing on or clicking the "i" information icon next to the report's title.
- 3 **Download:** The **Download** button allows users to download the current page as a CSV file, to download the Student Assessment Results extract for the selected assessment, or to download the printable Individual STUDENT Reports of the listed students.
- 4 **Assessment / Academic Year Selector:** A drop-down list of all assessments that the students have taken, organized by assessment type (Summative or Interim Comprehensive) and date administered. Drop-down also allows selection of other academic years for which there is available assessment data.
- 5 **Filter:** The **Filter** button opens a window that enables advanced filtering of student results by student demographic information.
- 6 **Select a Student:** Checkboxes next to student names allow users to select specific students for comparison or printing. "Deselect all" removes the selection.
- 7 **Column Sorting:** Column headers allow users to sort the list of students by the values in each column.
- 8 **Overall Score and Error Bands:** The overall score is indicated by a single number and as a dot on a continuum of scores. The score is surrounded by error bands, marked with a gray bar. This range indicates the range of scores that the student would be likely to achieve even if he or she took the test multiple times.
- 9 **Claim Information:** Mathematics and ELA/literacy are composed of claims. Within each claim, student performance is reported as Below Standard, At/Near Standard, or Above Standard. A description of each claim is provided.

## Detailed Descriptions

### Navigation

- A user with appropriate permissions can access the List of Students by Assessment GRADE report by clicking the grade in the Results by Grade for a SCHOOL report.
- A user can access the List of Students by Assessment GRADE report by clicking the grade in the breadcrumb navigation on an Individual STUDENT Report.
- A user can use the breadcrumb navigation to go back up to the SCHOOL, DISTRICT, or STATE reports.



Figure 17 - Breadcrumb Navigation

- A user must have PII access in order to see the List of Students by Assessment GRADE report and to navigate to a student's Individual STUDENT Reports by clicking his or her name.

### Selecting Assessment Results

- A user can see results of any assessment with available results via the Assessment Selector. The options in the Assessment Selector are based on all results for assessments designed for that grade. If a student has no results for the selected assessment, his or her row is not displayed. If a student has results only for either mathematics or ELA/literacy, then he or she is displayed when viewing both subjects, but is not displayed for the subject where there is no result.

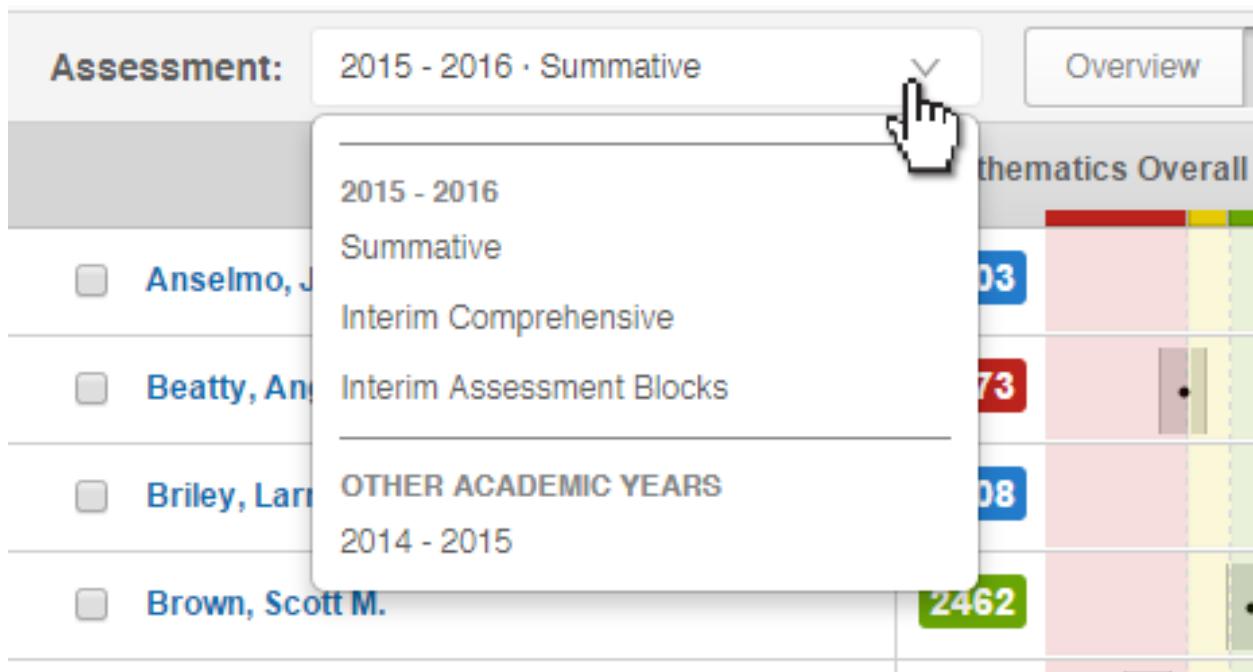


Figure 18 - List of Students by Assessment GRADE Assessment Selector

- A user can see report results for different years by selecting an Academic Year from the bottom of the Assessment Selector. Changing the Academic Year changes the list of students to those for whom assessment results exist for the selected grade in the selected Academic Year.

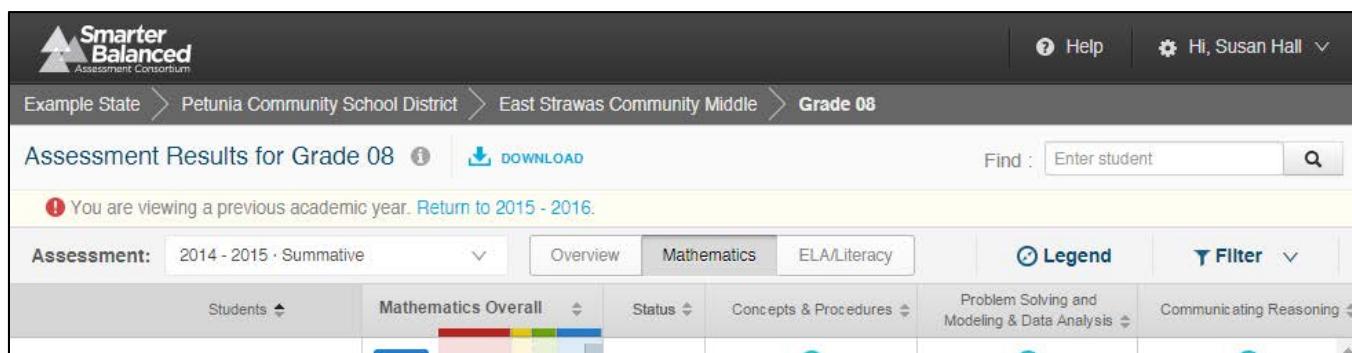


Figure 19 - Previous Year Warning

- When a previous academic year is selected, the report displays a warning message alerting users that the students displayed are those who took the selected grade's assessment in a prior academic year.
- By default, the report displays an Overview with results from both mathematics and ELA/literacy assessments.
- Selecting either the **Mathematics** or **ELA/Literacy** button displays a view that shows overall results and Claim levels for the selected assessment.

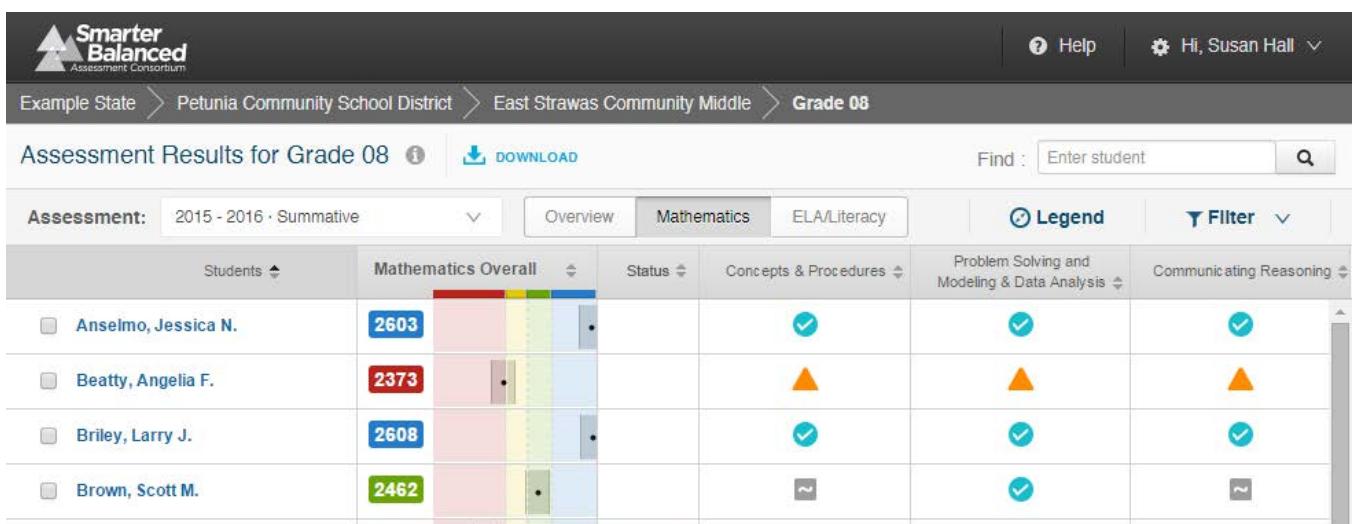
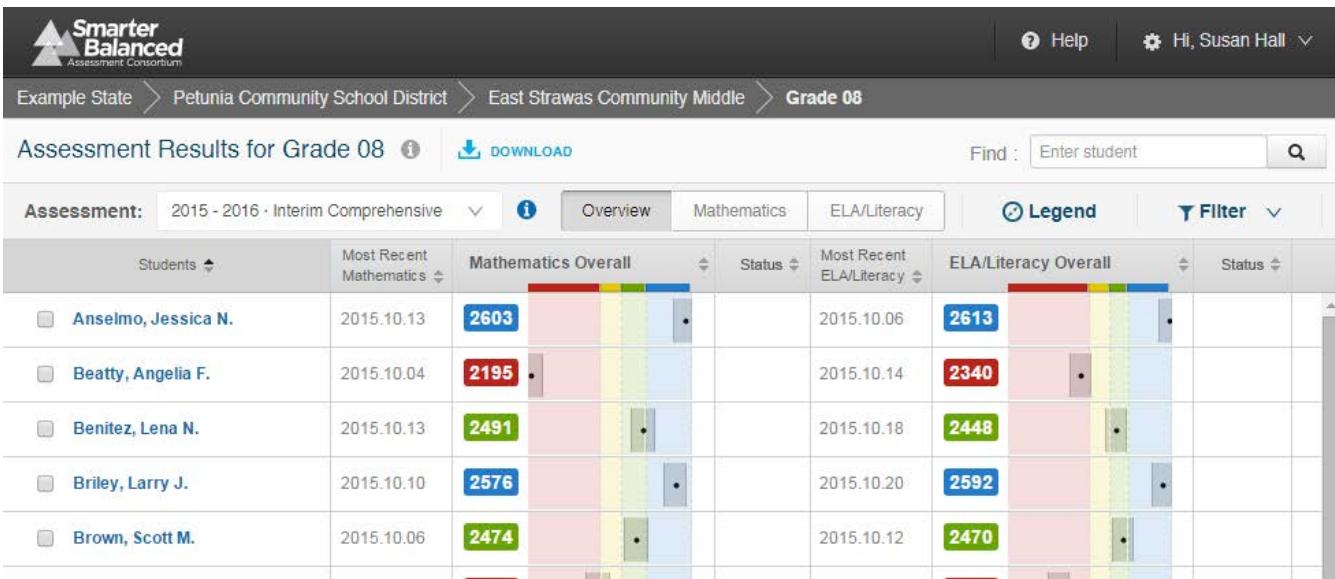


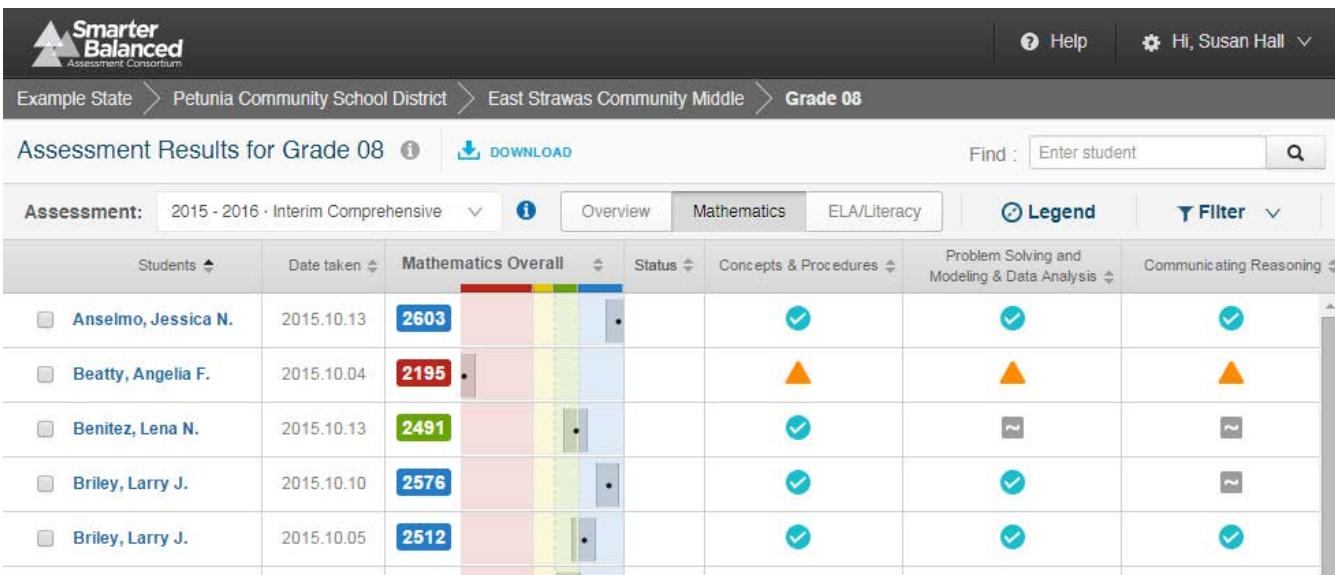
Figure 20 - Mathematics overall and claim scores

## Interim Comprehensive Assessments: Multiple Opportunities

- A user can see results of Interim assessments by selecting the particular Interim Comprehensive assessment via the Assessment Selector. Interim results appear identical to Summative results as described above with one exception: Interim results display the date an assessment was administered and may display multiple records per student to reflect multiple opportunities taken by that student.



- On the Overview screen, the Reporting system only displays the most recent score the student received for each of the subjects: Mathematics and ELA/Literacy. The date of the administration is displayed in the “Most Recent [subject name]” column.



- On the subject specific screens, the Reporting system displays all the scores the student received for that subject with the “Date taken” noted next to each.
- Users who want to see all the scores for each student can sort by Student name; users who want to see all results from a given administration can sort by Date taken.

## Informational Popup Windows

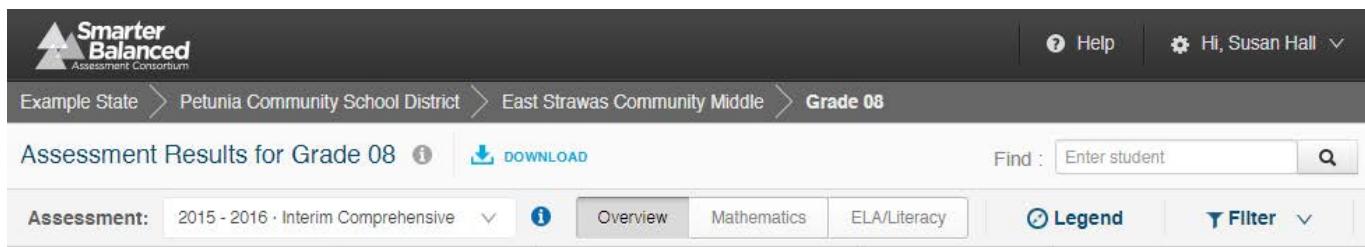


Figure 21 - List of Students by Assessment GRADE Information Indicators

Report information , Interim information , and Legend are all available by pausing on or clicking the respective icons.

The Report Information popup contains additional information about the purposes and proposed uses of the report. For the List of Students by Assessment GRADE, the text is as follows:

#### Purpose:

This report presents a list of individual student scores for a selected assessment.

#### Uses:

- Use this report to view the assessment results for a class or other sub-group of students, filtered or sorted for your specific needs.
- Review scale scores and error bands for overall student performance on a specific assessment.
- View claim score icons to understand students' performance for each claim.

#### Features:

- Select assessment and content area(s) to view
- Sort results by any column
- Select specific students to focus your review
- Search for particular students
- Filter students by attributes (e.g., Gender, IEP, Race/Ethnicity)
- Download student assessment results for further analysis
- Print Individual Student Reports (PDF) for a selected group of students

The Interim Information popup contains specific information about the nature of the interim assessment and suggests appropriate ways to interpret interim results. The text is as follows:

#### Important Information about Interim Assessments

1. Interim assessments may be scored by local teachers. This scoring is not subject to the rigorous controls used in summative assessment and local results may show some variations.
2. Interim assessment questions are not secure. Exposure to, and familiarity, with test questions may affect student performance and the accuracy of interim results.

The legend provides descriptions of all pictorial elements of the report, including Achievement Levels, Error Bands, Claim Levels, and the scale bar. It appears as follows:

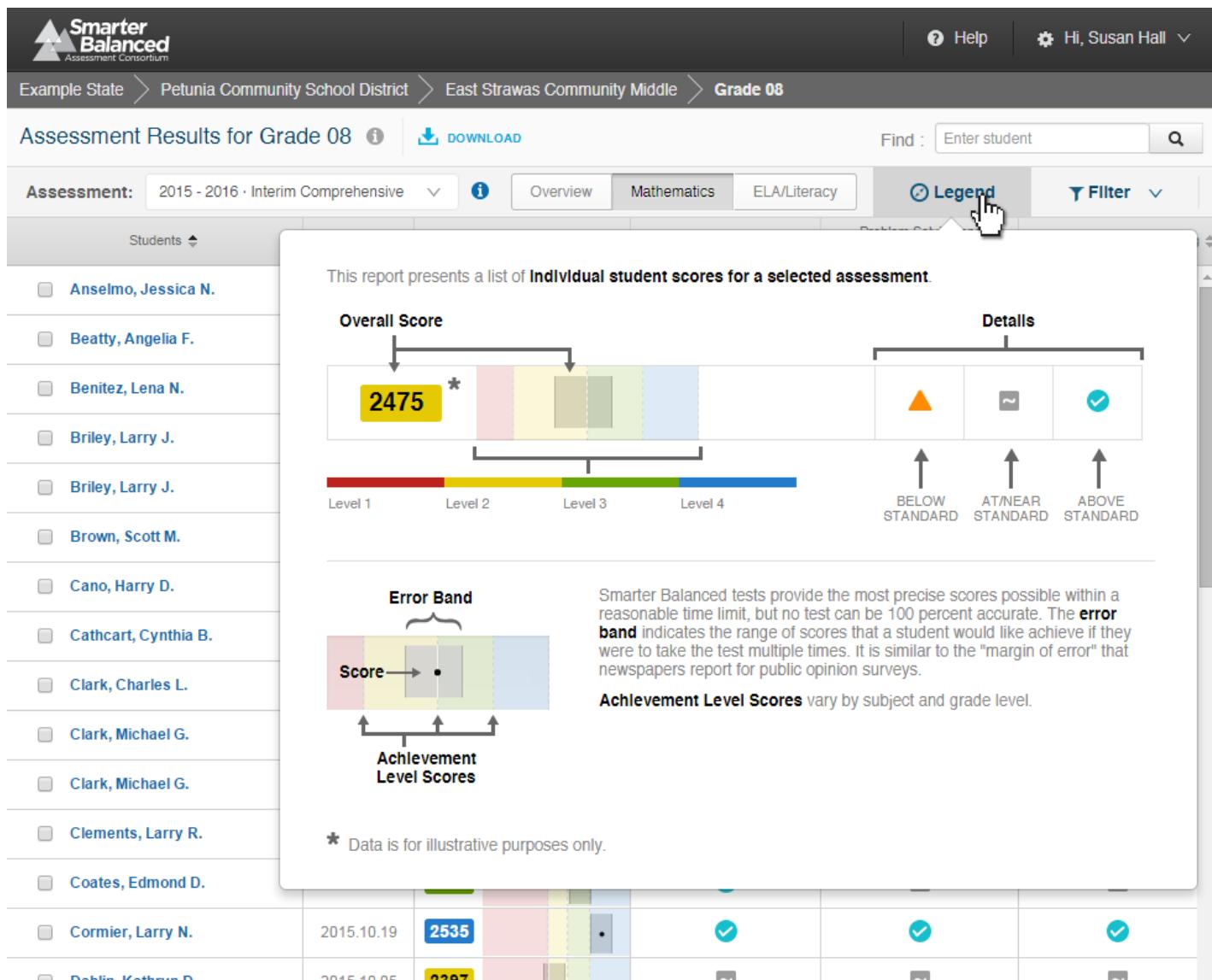


Figure 22 - List of Students by Assessment GRADE Legend

## Downloads

Download options are available by clicking the Download icon . There are several options for downloading information through the List of Students by Assessment GRADE report:

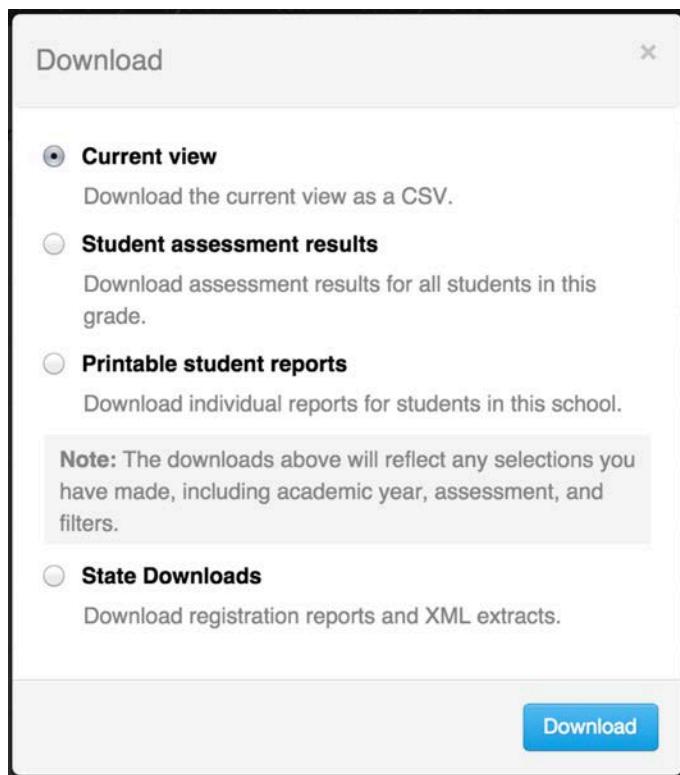


Figure 23 - Download Options Window

- **Current View:** All users with access to this report can download a tabular version of the current view of summary data (students, scores, and achievement levels, including any active filters, sorting, or selection) in CSV format for accessibility or external analysis.
- **Student Assessment Results:** A user with appropriate permissions can download the underlying Student Assessment Results for the students displayed on the report.
- **Printable Student Reports:** A user with appropriate permissions can download a batch PDF of Individual STUDENT Reports for the students displayed on the report.
- **State Downloads:** A user with appropriate permissions can request state-level downloads (see below for further description).

## Locating Specific Students

A user can use the Filtering, Sorting, and Find features to locate specific students, and the Selection feature to narrow focus onto any selected students.

**Sorting** - Sort the table by any column ascending or descending: alphabetically by student last name, by Overall scale scores, or by claim levels.

Students	Date taken	Mathematics Overall	Status	Concepts & Procedures	Problem Solving and Modeling & Data Analysis	Communicating Reasoning
Anselmo, Jessica N.	2015.10.13	2603	•	✓	✓	✓
Beatty, Angelia F.	2015.10.04	2195	•	▲	▲	▲
Benitez, Lena N.	2015.10.13	2491	•	✓	~	~

Figure 24 - List of Students by Assessment GRADE Sorting

**Filtering** - Filter the student list by student attributes:

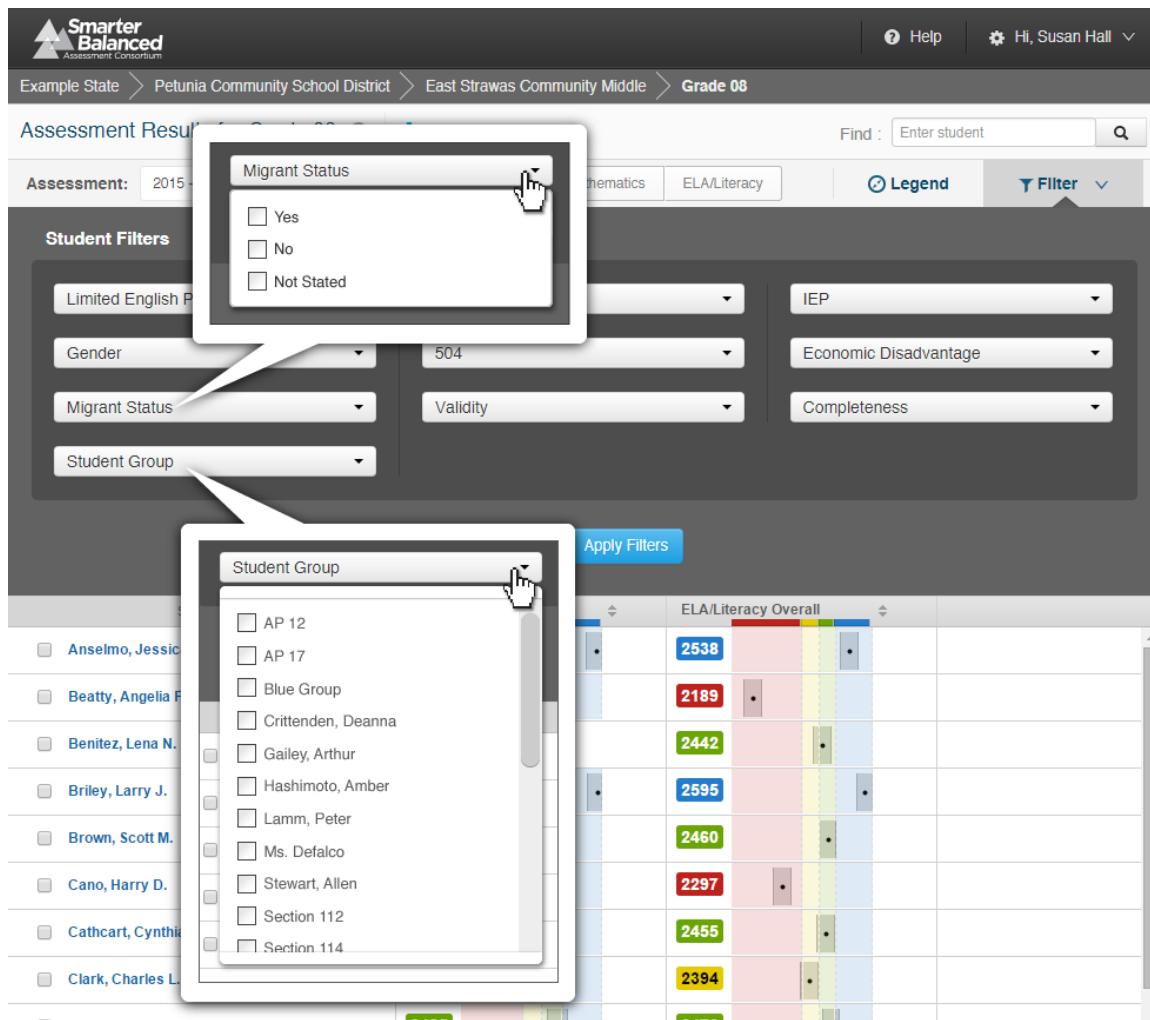


Figure 25 - List of Students by Assessment GRADE Filter Options

Selecting multiple options in a filter (e.g., AP 12 and Blue Group) returns a list composed of any students in either group (OR selection or Union). Selecting options in more than one filter (e.g., AP 12 and Yes under Migrant Status) returns a list of students who fit into both groups (AND selection or Intersection).

**Find a Student** - A user can click the Find box or use the browser Find command (Ctrl+F), to type in a part or whole name of a student. The report scrolls down to the first entry matching the search string and provides controls to navigate through any matching entries.

**Select Specific Students** - Each student in the list has a checkbox next to their name to narrow the list. A user can select specific students to compare them to one another or print them out in a batch.

Viewing 3 Students		Show All Students					
Students		Mathematics Overall		Status	Concepts & Procedures	Problem Solving and Modeling & Data Analysis	Communicating Reasoning
Beatty, Angelia F.	2603	●	●	●	✓	✓	✓
Brown, Scott M.	2373	●	●	●	▲	▲	▲
Cano, Harry D.	2608	●	●	●	✓	✓	✓

Figure 26 - List of Students by Assessment GRADE Selection

## Printing

The report as displayed can be printed directly by the built-in browser **Print** command (Ctrl+P). The List of Students by Assessment GRADE report also provides the ability to download the underlying Individual STUDENT Reports in a batch PDF file for bulk printing (see Downloads).

## Language Support

The textual content of the Reporting System is available for viewing and printing in English by default, but users can select to view or print the content in either Spanish or Vietnamese.

## Student Privacy

This report contains student personally identifiable information (PII). Therefore, only users with authorization and system permissions to access PII for this student can view this report. Authorization and permissions are set by each state and passed to the Reporting System when a user logs in to the system.

- 1) In order to see a given Individual STUDENT Report, a user must meet these three requirements:
  - o Have appropriate external authorization to access PII
  - o Be authenticated through the Smarter Balanced operational Single Sign-On component
  - o Have appropriate permissions assigned to their user account through the Smarter Balanced Permissions component
- 2) PII access permissions are defined at the school level or above and managed through the Smarter Balanced Single Sign-On component and the Permissions component.
- 3) This report is available in either of the two following cases:
  - o In the Consortium-level system, if a given state has provided the Consortium with student PII (i.e., names); or
  - o In a state-operated reporting system, if that state has deployed their own instance of the Smarter Balanced Reporting and Data Warehouse solution and provided the system with the above-mentioned data.
- 4) The reporting system does not display links between teachers and students. This prevents any automated reporting on a teacher, class or section level.
- 5) To display this report in a state-operated reporting system, the state would need to deploy its own instance of the Smarter Balanced Reporting and Data Warehouse solution and provide the system with the above-mentioned data.

- 6) The data that drive the List of Students by Assessment GRADE reports, including overall (scale score, error band, and achievement level) and claim (scale score, error band, and claim level) data, are calculated by the Test Integration component and passed to the Data Warehouse. Neither the Reporting System nor the Data Warehouse calculate or compute scores, error bands, or performance levels.

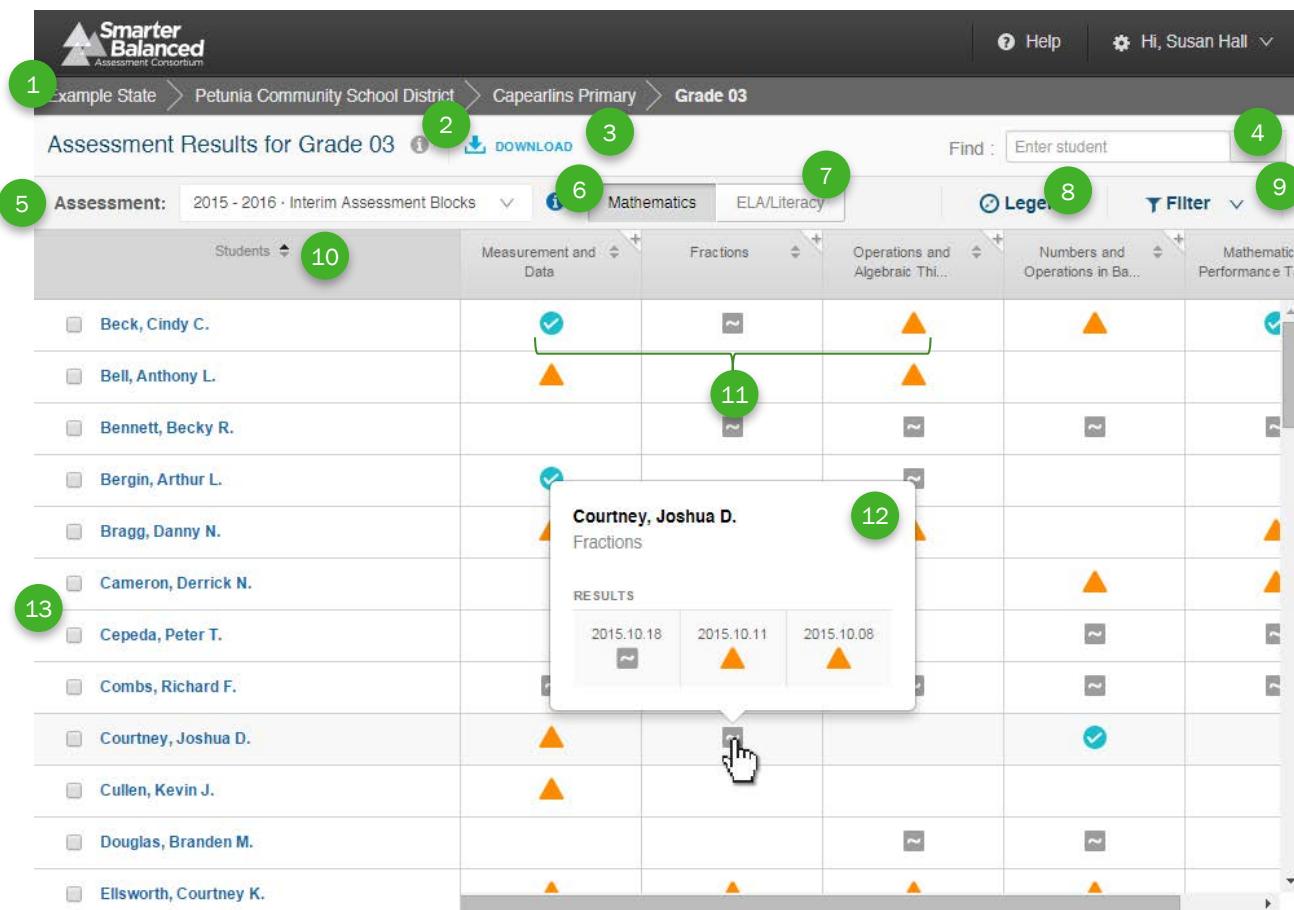
#### **1.1.2.1 IAB List of Students by Assessment GRADE Report**

This report provides assessment results for a list of students.

The list of students is determined by the selection of district, school, and grade, and then refined by the Assessment Selector. The list is generated based on data available on results for assessments designed for the selected grade and taken during the selected Academic Year.

The list can be viewed for results in either mathematics or ELA/literacy, and displays results for all blocks designed for that grade that have been taken by any students in that grade.

This list does not represent enrollment-based classes or sections, as there are no persistent teacher-student links in the Data Warehouse. However, students in the list can be filtered, sorted, and selected to assist in narrowing focus. Filters are provided using all demographic and program data available, as well as Student Groups that may be used as desired by Member States. The list can be sorted in ascending or descending order by the values in any column (e.g., alphabetically by last name or numerically by scores).



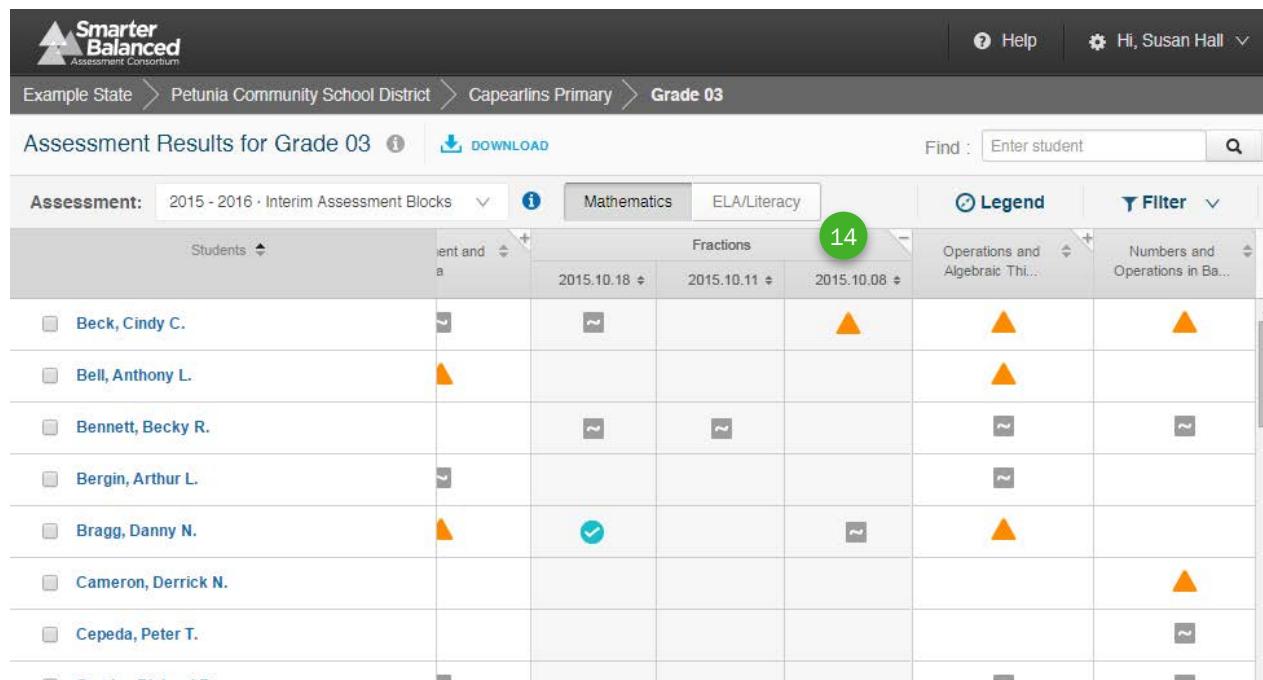
This screenshot shows the reporting system interface for Grade 03. The top navigation bar includes the Smarter Balanced logo, a 'Help' link, and a 'Hi, Susan Hall' greeting. The main content area displays 'Assessment Results for Grade 03' for the '2015 - 2016 · Interim Assessment Blocks'. The results are categorized by subject: Mathematics, ELA/Literacy, and Science. A 'Find' search bar is available. The 'Assessment' dropdown is set to '2015 - 2016 · Interim Assessment Blocks'. A legend and filter buttons are also present.

The student list on the left shows names like Beck, Cindy C.; Bell, Anthony L.; Bennett, Becky R.; Bergin, Arthur L.; Bragg, Danny N.; Cameron, Derrick N.; Cepeda, Peter T.; Combs, Richard F.; Courtney, Joshua D.; Cullen, Kevin J.; Douglas, Branden M.; and Ellsworth, Courtney K. Each student has a row of icons representing their performance across various categories.

A callout box highlights the 'Fractions' section for Courtney, Joshua D. The box contains the student's name, the category 'Fractions', and a 'RESULTS' table with three dates: 2015.10.18, 2015.10.11, and 2015.10.08. The table shows a checkmark for 2015.10.18 and two orange triangles for 2015.10.11 and 2015.10.08.

Numbered circles 1 through 14 are overlaid on the interface to point out specific features:

- Example State > Petunia Community School District > Capearlins Primary > Grade 03
- Assessment Results for Grade 03
- DOWNLOAD
- Find : Enter student
- Assessment: 2015 - 2016 · Interim Assessment Blocks
- Mathematics
- ELA/Literacy
- Legend
- Filter
- Students
- Measurement and Data
- Fractions
- Operations and Algebraic Thinking
- Numbers and Operations in Base Ten
- Mathematics Performance Tasks
- Courtney, Joshua D.
- Fractions
- RESULTS
- 2015.10.18
- 2015.10.11
- 2015.10.08
- Beck, Cindy C.
- Bell, Anthony L.
- Bennett, Becky R.
- Bergin, Arthur L.
- Bragg, Danny N.
- Cameron, Derrick N.
- Cepeda, Peter T.
- Combs, Richard F.
- Courtney, Joshua D.
- Cullen, Kevin J.
- Douglas, Branden M.
- Ellsworth, Courtney K.



This screenshot shows the same reporting system interface for Grade 03, but with a different set of students listed on the left. The students shown are Beck, Cindy C.; Bell, Anthony L.; Bennett, Becky R.; Bergin, Arthur L.; Bragg, Danny N.; Cameron, Derrick N.; and Cepeda, Peter T. The interface includes the same navigation bar, search bar, and category filters as the first screenshot.

The student list on the left shows names like Beck, Cindy C.; Bell, Anthony L.; Bennett, Becky R.; Bergin, Arthur L.; Bragg, Danny N.; Cameron, Derrick N.; and Cepeda, Peter T. Each student has a row of icons representing their performance across various categories.

Numbered circles 14 are overlaid on the interface to point out specific features:

- Example State > Petunia Community School District > Capearlins Primary > Grade 03
- Assessment Results for Grade 03
- DOWNLOAD
- Find : Enter student
- Assessment: 2015 - 2016 · Interim Assessment Blocks
- Mathematics
- ELA/Literacy
- Legend
- Filter
- Students
- Measurement and Data
- Fractions
- Operations and Algebraic Thinking
- Numbers and Operations in Base Ten
- Mathematics Performance Tasks
- Beck, Cindy C.
- Bell, Anthony L.
- Bennett, Becky R.
- Bergin, Arthur L.
- Bragg, Danny N.
- Cameron, Derrick N.
- Cepeda, Peter T.

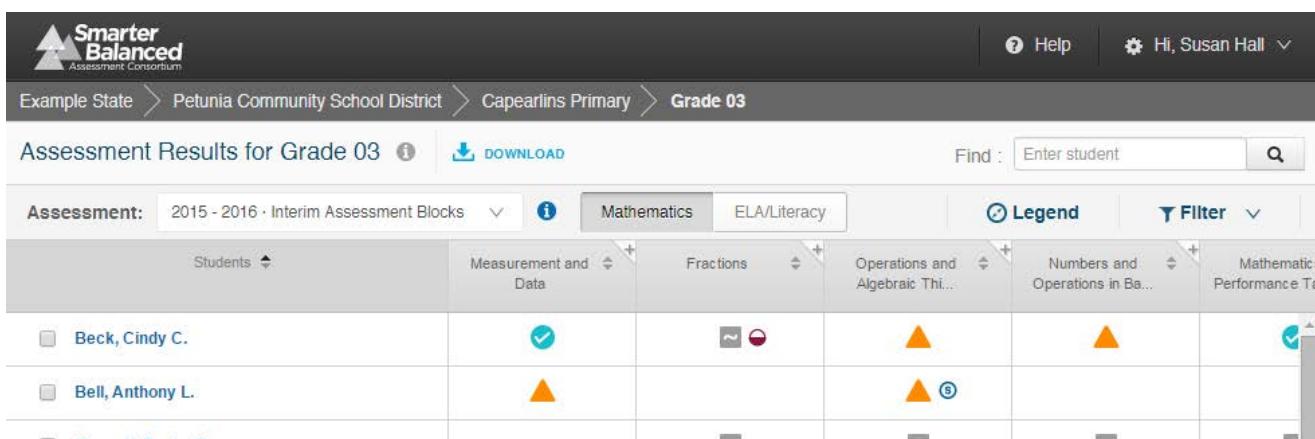


Figure 27 – IAB List of Students by Assessment GRADE

## Report Features

- 1 **Breadcrumb:** At the top of the page, users can navigate back to the School, District, and State level reports.
- 2 **Report Information:** Detailed report information regarding the report's purpose and its prospective uses is accessible by pausing on or clicking the "i" information icon next to the report's title.
- 3 **Download:** The Download button allows users to download the current page as a CSV file or to download the Individual Student Reports of the listed students.
- 4 **Find a student:** A text input field that allows users to search the current page for a student's name.
- 5 **Assessment / Academic Year Selector:** A drop-down list of all assessments that the students have taken, organized by assessment type (Summative or Interim Comprehensive) and date administered. Drop-down also allows selection of other academic years for which there is available assessment data.
- 6 **Interim Report Information:** Important information from Smarter Balanced on the qualification of interim results.
- 7 **Subject Selector:** The Subject Selector allows users to view results for Mathematics or for ELA/Literacy.
- 8 **Legend:** The Legend provides a resource that describes the visual elements and concepts present on the report.
- 9 **Filter:** The Filter button opens a window that enables advanced filtering of student results by student demographic information.
- 10 **Sort by Column:** Column headers allow users to sort the list of students by the values in each column.
- 11 **Interim Assessment Block scores:** A performance level of Below Standard, At or Near Standard, or Above Standard, is determined for each administration of an IAB. The score is reported in a similar way as the Claim Levels for summative or interim comprehensive assessments.
- 12 **Individual Mouse-over:** To see additional detail on a given student's result for a specific block, a user can mouse-over a cell to see the list of administration dates and results that student took, with the most recent result to the left.

- 13 **Select a Student:** Checkboxes next to student names allow users to select specific students for comparison or printing. "Deselect all" removes the selection.
- 14 **Expand Column:** When there have been more than one administration of a given block (e.g., Grade 7 Number System), the latest results for all students will be displayed. The user can expand the "Number System" column to see results from all administrations.
- 15 **Horizontal Scrolling:** The number of blocks differs between grades. When there are more blocks available than the screen width supports, a user can scroll horizontally to see more blocks.



The screenshot shows the Smarter Balanced Reporting System interface. At the top, there's a navigation bar with the Smarter Balanced logo, a help link, and a greeting "Hi, Susan Hall". Below the navigation, the path is shown: Example State > Petunia Community School District > Capearlins Primary > Grade 03. The main area is titled "Assessment Results for Grade 03" with a "DOWNLOAD" button. A search bar says "Find : Enter student". Below this, there are tabs for "Assessment: 2015 - 2016 · Interim Assessment Blocks", "Mathematics", "ELA/Literacy", "Legend", and "Filter". The "Mathematics" tab is selected. The results grid has columns for "Students" and several mathematical topics: "Measurement and Data", "Fractions", "Operations and Algebraic Thinking", "Numbers and Operations in Base Ten", and "Mathematics Performance Tasks". Each student row contains icons representing their performance in each category. A legend icon is visible at the bottom left of the grid.

16

Partial Icon: If the student did not attempt all the questions or items on a test, the score is based on a partial attempt.

17

Standard Icon: This indicator is applied to the Interim assessment results, if the conditions under which the student attempted a test are standardized.

## Detailed Descriptions

### Navigation

- A user can access the IAB List of Students by Assessment GRADE report by using the Assessment Selector once they have navigated to the List of Students by Assessment GRADE report.
- A user with appropriate permissions can access the List of Students by Assessment GRADE report by clicking the grade in the Results by Grade for a SCHOOL report.
- A user can access the List of Students by Assessment GRADE report by clicking the grade in the breadcrumb navigation on an Individual STUDENT Report.
- A user can use the breadcrumb navigation to go back up to the SCHOOL, DISTRICT, or STATE reports.



Figure 28 - Breadcrumb navigation

- A user must have PII access in order to see the List of Students by Assessment GRADE report and to navigate to a student's Individual STUDENT Reports by clicking his or her name.

### Selecting Assessment Results

- A user can see results of any assessment with available results via the Assessment Selector. The options in the Assessment Selector are based on all results for assessments designed for that grade. If a student has no results for the selected assessment, his or her row will not be displayed. If a student has results only for either mathematics or ELA/literacy, then he or she will be displayed when viewing both subjects, but will not be displayed for the subject where there is no result.

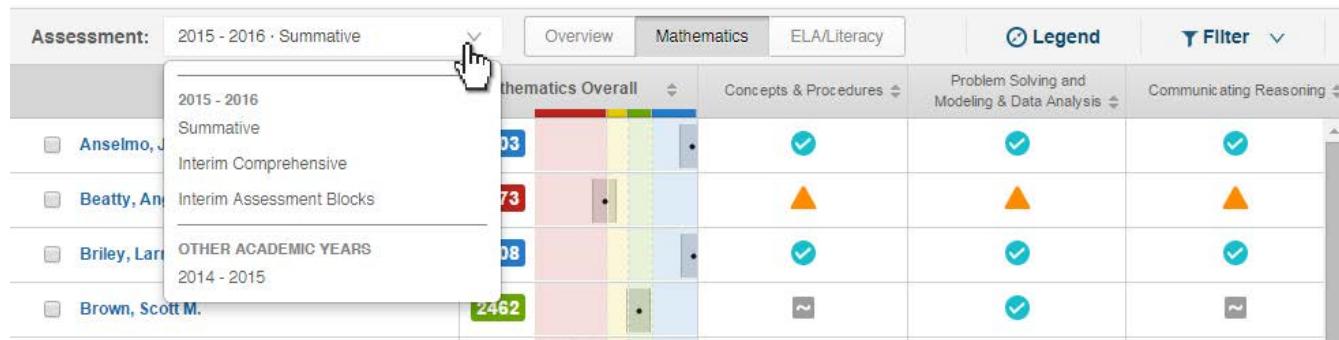


Figure 29 - List of Students by Assessment GRADE Assessment Selector

- A user can see report results for different years by selecting an Academic Year from the bottom of the Assessment Selector. Changing the Academic Year will change the list of students to those for whom assessment results exist for the selected grade in the selected Academic Year.

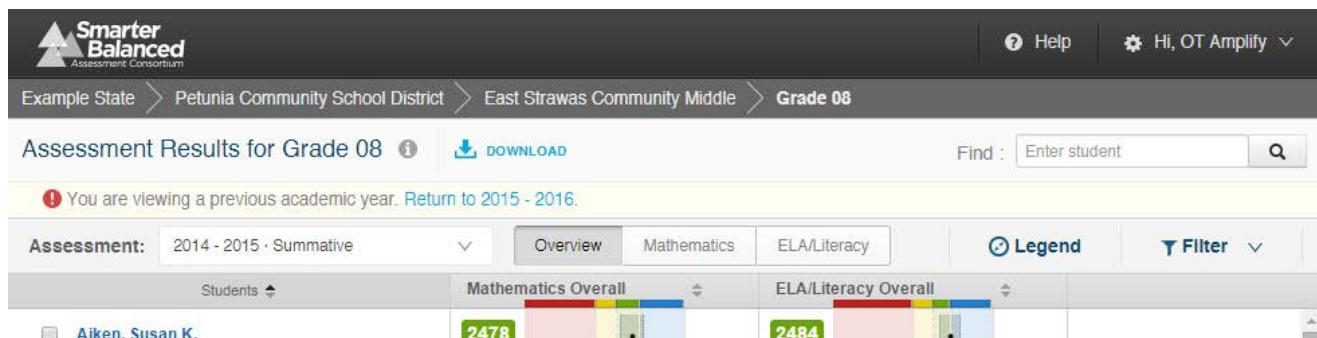


Figure 30 - Previous Year Warning

- When a previous academic year is selected, the report displays a warning message alerting users that the students displayed are those who took the selected grade's assessment in a prior academic year.
- The default display for IAB results is mathematics, unless the user has previously selected ELA/Literacy. There is no "Overview" display for IAB.
- Selecting either the **Mathematics** or **ELA/Literacy** button will display a view that shows IAB scores for the students who took an IAB in that district, in that school, designed for that grade, in the selected subject in that academic year.

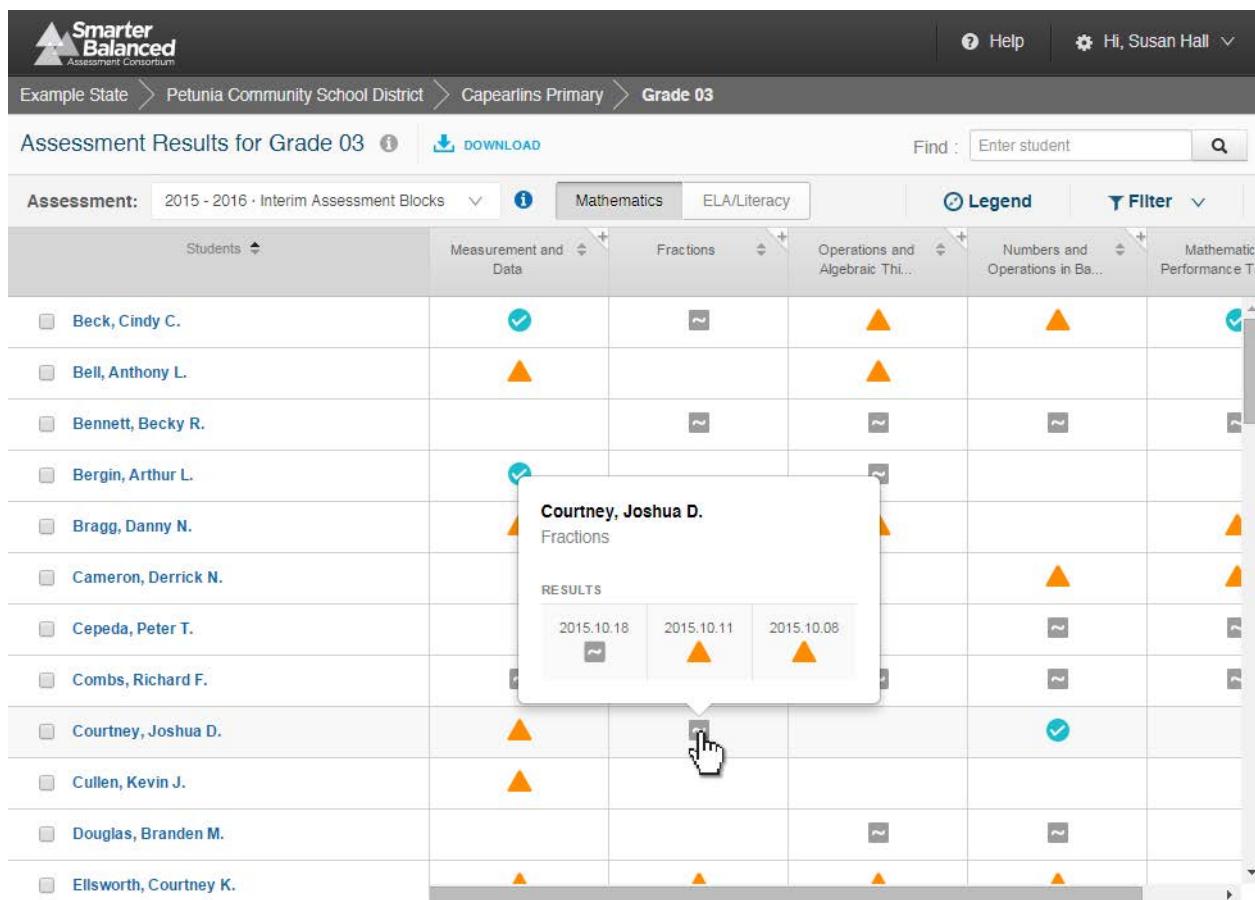


Figure 31 - Mathematics IAB scores

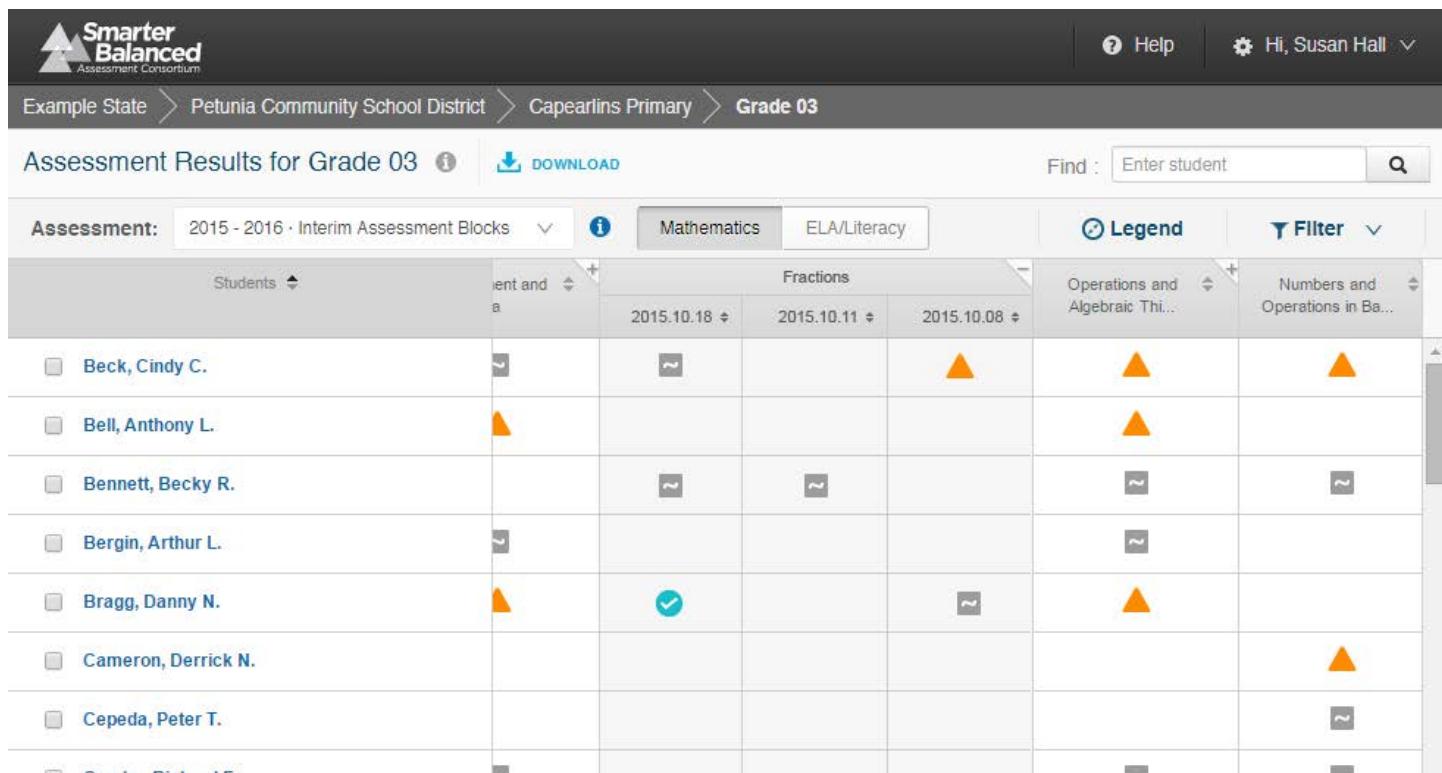
## Reporting for multiple block administrations (expanding columns)

In the case where a class, group of students, or an individual student is assessed multiple times on a single block in a given academic year, the default display will show each student's most recent result for that block. Since the history of results for each block will be a useful reference for educators, there is a feature that can expand a block's academic year administration history for an entire List of Students by Assessment GRADE.

To reveal this, each column for a block with more than one administration will have an expansion, or “+”, control in the upper-right corner. When a user clicks on that “+” control, the column will expand to show the administrations, with the most recent to the left. Administrations can be identified by their administration dates, and each administration can be sorted by scores.

Not all students will take every administration, so some students may not have entries in all the expanded columns.

Please note that this is slightly different than the individual mouse-over, which only displays the results for the student and does not show any administration gaps.



Assessment Results for Grade 03		DOWNLOAD	Find : Enter student	
Assessment:		2015 - 2016 · Interim Assessment Blocks	Mathematics	ELA/Literacy
		Fractions		
Students	Content and Administration	2015.10.18	2015.10.11	2015.10.08
Beck, Cindy C.	Operations and Algebraic Thinking	▲	▲	▲
Bell, Anthony L.	Fractions	▲		▲
Bennett, Becky R.	Operations and Algebraic Thinking	~	~	~
Bergin, Arthur L.	Fractions	~		~
Bragg, Danny N.	Operations and Algebraic Thinking	▲	✓	~
Cameron, Derrick N.	Fractions			~
Cepeda, Peter T.	Operations and Algebraic Thinking			~
Combs, Richard E.	Fractions			~

Figure 32 - Expanding Columns

## Printing

The report as displayed can be printed directly by the built-in browser **Print** command (Ctrl+P). The List of Students by Assessment GRADE report has the potential to display multiple expanded columns, so the Print solution handles the situation by expanding both horizontally (for many columns) and vertically (for long lists). Each page includes information about which rows and columns are included.

Students in Grade 7   2014-2015						
Interim Assessment Blocks · Mathematics						
Example State / Daybreak School District / Western Middle						
1-33 of 40 students   Columns 1-7						
Ahrens, Manuel	✓	~				
Berlin, Hannah	~		✓	✓		
Bridge, Beatrice	✓		✓	▲		~
Ceballos, Colleen	▲				✓	
Colvin, Kenneth	~	✓	✓			✓
Combs, Kevin	~					
Crittenden, Deanna	▲			~	✓	✓
Croft, Sheryl	✓	✓	~			
Dillingham, Marvin	✓	▲		✓		
Fisk, Roger	✓				~	✓

Figure 33 - Print layout for IAB, List of Students by Assessment GRADE, upper-left (1 of 4)

34-40 of 40 students   Columns 1-7							
Students ▾	Ratio and Proportional Relationships	Number System			Expressions and Equations		
		2015.01.24	2014.12.20	2014.10.30	2015.01.14	2014.12.11	2014.10.22
Surratt, Travis	▲	~					
Sutphin, Carolyn	✓	✓					
Waddell, Regina	✓	▲		~		✓	~
Waugh, Keith	✓				▲		
Western, Jack	~		▲				
Willette, Jennie	✓						
Yi, Erica	▲	✓		✓			

Figure 34 - Print layout for IAB, List of Students by Assessment GRADE, lower-left (2 of 4)

**Students in Grade 7 | 2014-2015**  
 Interim Assessment Blocks - Mathematics  
 Example State / Daybreak School District / Western Middle

1-33 of 40 students | Columns 1-7      Additional columns >

Ahrens, Manuel	✓	~						
Berlin, Hannah	~			✓	✓			
Bridge, Beatrice	✓		✓	▲			~	
Ceballos, Colleen	▲				✓			
Colvin, Kenneth	~	✓	✓				✓	
Combs, Kevin	~							
Crittenden, Deanna	▲				~	✓	✓	
Croft, Sheryl	✓	✓	~					
Dillingham, Marvin	✓	▲		✓				
Fisk, Roger	✓						~	✓
Galley, Arthur	~			✓				▲
Galarza, Allen	✓				~			
Gallagher, Betty	▲		~					▲
Hashimoto, Amber	~			~		✓		
Hutton, Eisle	~	✓	✓					
Imhoff, Rosalie	▲						~	
Jaffe, Terry	✓	✓	~	▲	✓			✓
Lamm, Peter	✓		✓		▲		▲	
Lattimore, Fannie	✓		▲					✓
Lum, Brian	~	~						
Marine, Christine	✓							
McGowan, Kenneth	▲			▲			~	
Meredith, Fred	~						~	
Montemayor, Ralph	~				✓			
Nickel, Clarence	▲	~	✓				✓	
Ordonez, Martin	✓				✓			
Pifer, Bertha	✓		✓	~				~
Pollard, Alan	✓						~	
Rainey, Pauline	~	~		✓	~		✓	
Sessoms, Kenneth	✓		~					
Shealy, Amy	▲	✓						~
Shows, Walter	~			~	▲	~		
Speed, Gerald	~		▲	✓				✓

Figure 35 - Print layout for IAB, List of Students by Assessment GRADE, upper-right (3 of 4)

34-40 of 40 students | Columns 8-9

Students ▾	Geometry	Statistics and Probability	
Surratt, Travis	✓	▲	
Sutphin, Carolyn	✓	✓	
Waddell, Reglina	~	✓	
Waugh, Keith	✓	✓	
Western, Jack	▲	~	
Willette, Jennie	~	✓	
Yi, Erica	~	▲	

**Report Info**

This report presents a list of individual student scores on the **interim block assessments** for a selected academic year.

▲ **BELOW STANDARD**

Test results clearly show that student has not yet met the standard in this subject area for the grade.

~ **AT/NEAR STANDARD**

Test results may be just above or just below the standard, but due to the error band, the result is too close to call.

✓ **ABOVE STANDARD**

Test results clearly show that student understands and is able to apply their knowledge to the standards in this subject area for the grade.

**Uses:**

- Use this report to view the most recent interim block assessment results for all the students in a class or other subgroup of students, filtered or sorted for your specific needs.
- Review results of previous administrations of specific assessment blocks.
- View block score icons to understand students' performance for each block.

Figure 36 - Print layout for IAB, List of Students by Assessment GRADE, lower-right (4 of 4)

### 1.1.3 Results by Grade for a SCHOOL

This report provides a list of grades for a given school, with multi-colored bars that represent the different achievement levels on the summative assessment. The percentages of students performing at each level appear as numbers in the bars, and the number of students assessed appears next to the bars. This report also displays the overall aggregate of all the assessed students in the school. Interim assessment results are not aggregated.

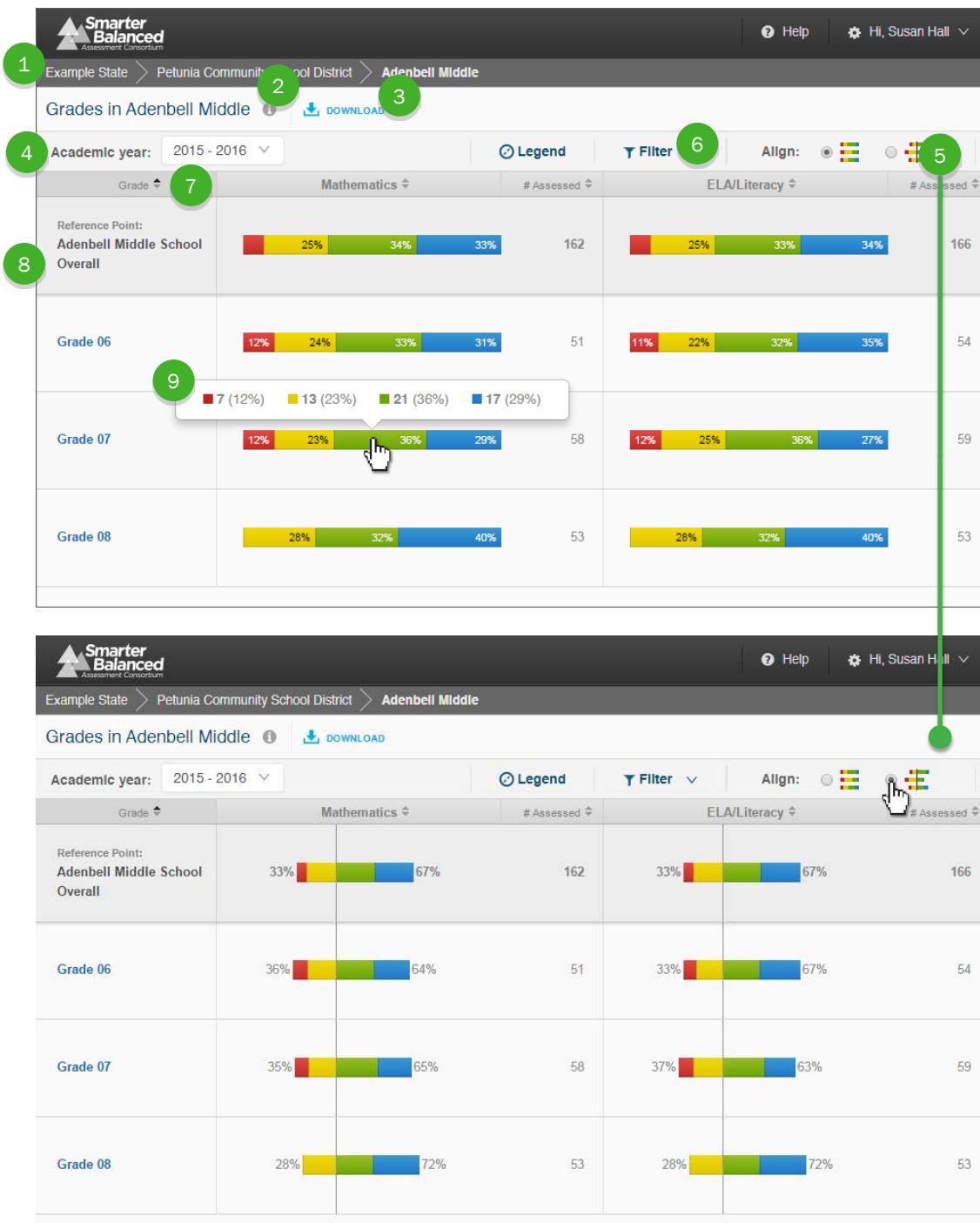


Figure 37 - Results by Grade for a SCHOOL

## Report Features

- 1 **Breadcrumbs:** At the top of the page, users can navigate back to the district and state level reports.
- 2 **Report Information:** Detailed report information regarding the report's purpose and its prospective uses is accessible by pausing on or clicking the "i" information icon next to the report's title.
- 3 **Download:** The **Download** button allows users to download the current page as a CSV file, or to download the underlying data for analysis.
- 4 **Academic Year Selector:** This dropdown list displays all academic years for which there is available assessment data.
- 5 **Align:** The **Align** switch allows users to display results centered along the cut between achievement levels 2 and 3.
- 6 **Filter:** The **Filter** button opens a window that enables advanced filtering of student results by student demographic information.
- 7 **Column Sorting:** Column headers allow users to sort the list of grades by the values in each column.
- 8 **Reference Row:** Percentages and counts of students in each achievement level across the entire school.
- 9 **Achievement Level Aggregates:** Percentages and actual counts of students in each achievement level for each grade. Users can pause on the information to display the actual counts of students in each achievement level.

## Detailed Descriptions

### Navigation

- A user with appropriate permissions can access the Results by Grade for a SCHOOL report by clicking the school's name in the Comparing Schools in a DISTRICT report.
- A user can access the Results by Grade for a SCHOOL report by clicking the school's name in the Breadcrumb Navigation of an Individual STUDENT Report or a List of Students by Assessment GRADE report.
- A user can go back up to the DISTRICT or STATE reports by following the breadcrumbs on top.

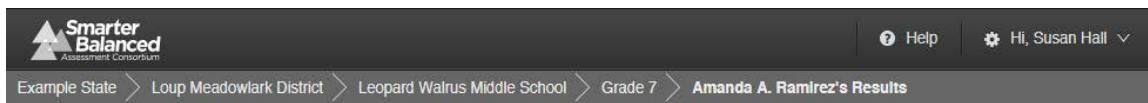


Figure 38 - Breadcrumb Navigation

- Users do not need PII access to see the Results by Grade for a SCHOOL report, but they must have PII access for the List of Students by Assessment GRADE report. Therefore, a user with PII access can click Grade names to see the list of students in that assessment grade, but a user without PII access is not provided with those links.

## Selecting Assessment Results

- A user can see results for the summative assessment for any academic year for which there are available results via the Academic Year Selector. The options in the Academic Year Selector are based on all assessment results received by the Data Warehouse.
- This report only displays aggregations of summative results, not interim results.
- When a previous academic year is selected, the report displays a warning message saying the results displayed are for a prior academic year's assessments.

## Informational Popup Windows

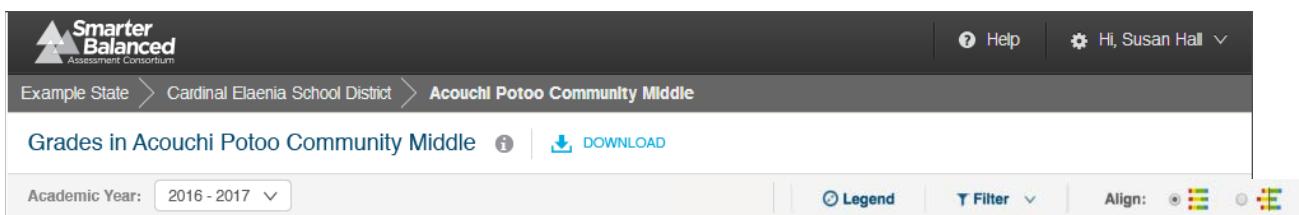


Figure 39 - Results by Grade for a SCHOOL Information Indicators

Report Information and Legend are all available by pausing on or clicking the respective icons.

The Report Information popup contains additional information about the purposes and proposed uses of the report. For the Results by Grade for a SCHOOL report, the text is as follows:

### Purpose:

This report presents a view of student performance on the most recent summative assessment for each grade in a selected school. For each grade, the report displays the percentage of students in each achievement level and the number of students assessed.

### Uses:

- Use this report to compare overall achievement between grades in a school.
- Filter the view to analyze sub-groups within a grade.

### Features:

- Align the visual display by the percentage of students in each achievement level or along the line between Level 2 and Level 3
- Sort results by any column
- Filter results by attributes (e.g., Gender, IEP, Economic Disadvantage)
- Download student assessment results for further analysis
- Print Individual Student Reports (PDF) for all students in the school

The legend provides descriptions of all pictorial elements of the report, including Achievement Levels and the population bar. It appears as follows:

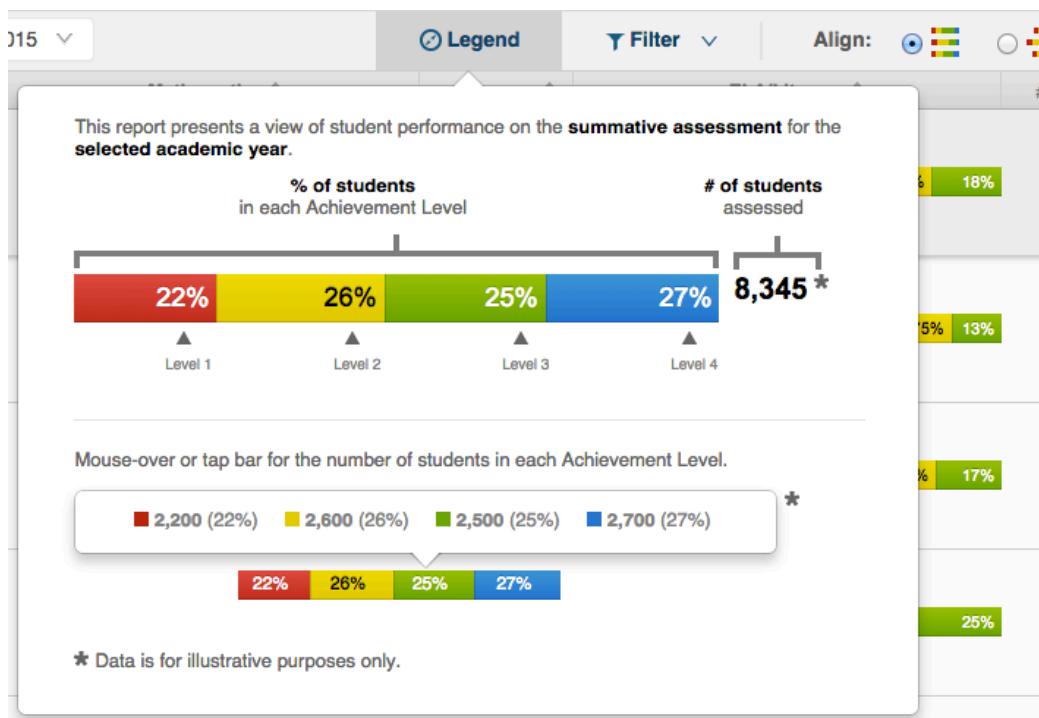


Figure 40 - Results by Grade for a SCHOOL Legend

## Downloads

Download options are available by clicking the Download icon . There are several options for downloading information through the Results by Grade for a SCHOOL report:

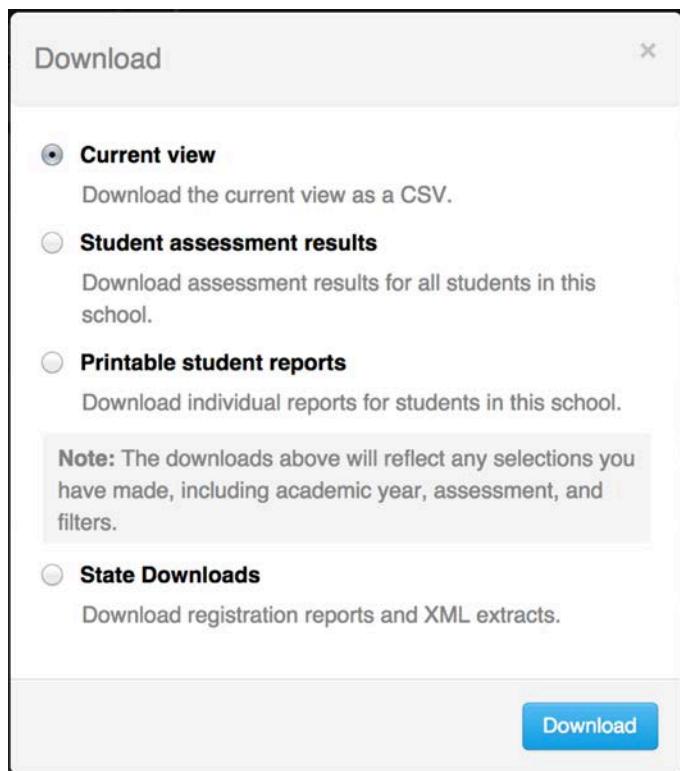


Figure 41 - Download Options Window

- Current View:** All users with access to this report can download a tabular version of the current view of summary data (students, scores, and achievement levels, including any active filters, sorting, or selection) in CSV format for accessibility or external analysis.
- Student Assessment Results:** A user with appropriate permissions can download the underlying Student Assessment Results for the students displayed on the report. If the school being viewed has only provided results of Interim assessments, this option is not available.
- Printable Student Reports:** A user with appropriate permissions can download a batch PDF of Individual STUDENT Reports for the students displayed on the report. If the school being viewed has only provided results of Interim assessments, this option is not available.
- State Downloads:** A user with appropriate permissions can request state-level downloads (see below for further description).

## Filtering

A user can filter the results by demographic subgroups for in-depth analysis of their results.

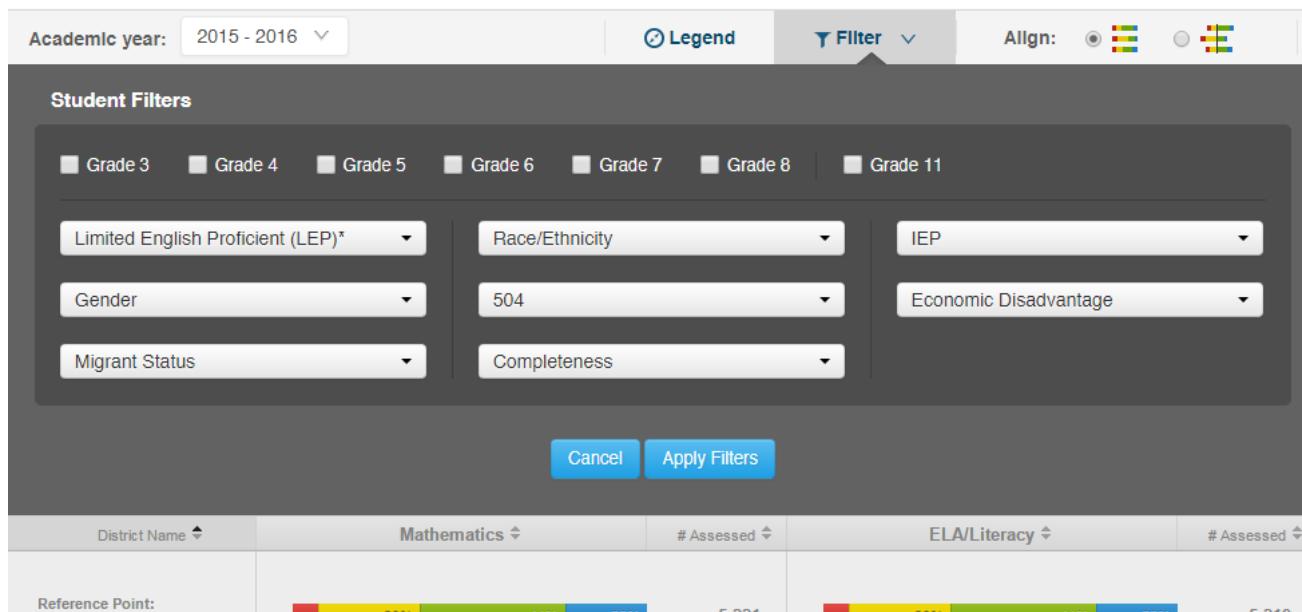


Figure 42 - Results by Grade for a SCHOOL Filter Options

Selecting multiple options in a filter (e.g., Hispanic/Latino and Two or More Races from Race/Ethnicity) returns aggregates composed of any students in either group (OR selection or Union). Selecting options in more than one filter (e.g., Yes under Economic Disadvantage and Yes under Migrant Status) returns a list of students who fit into both groups (AND selection or Intersection).

## Align

Achievement Level proportion bars can be either aligned by endpoints, or centered on the cut between levels 2 and 3. A user can click the **Align** button to toggle between the two options.

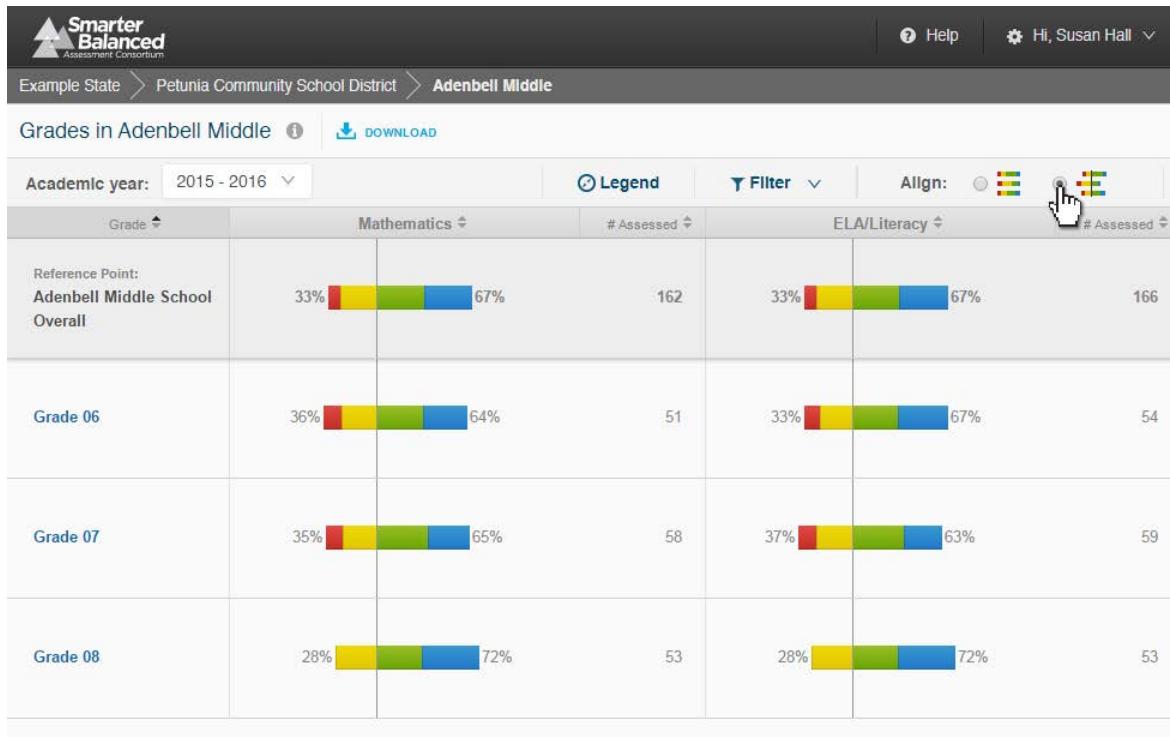


Figure 43 - Align Feature

## Achievement Level Counts

Pausing on an Achievement Level bar displays numbers of students and percentages by Achievement Level for each level.

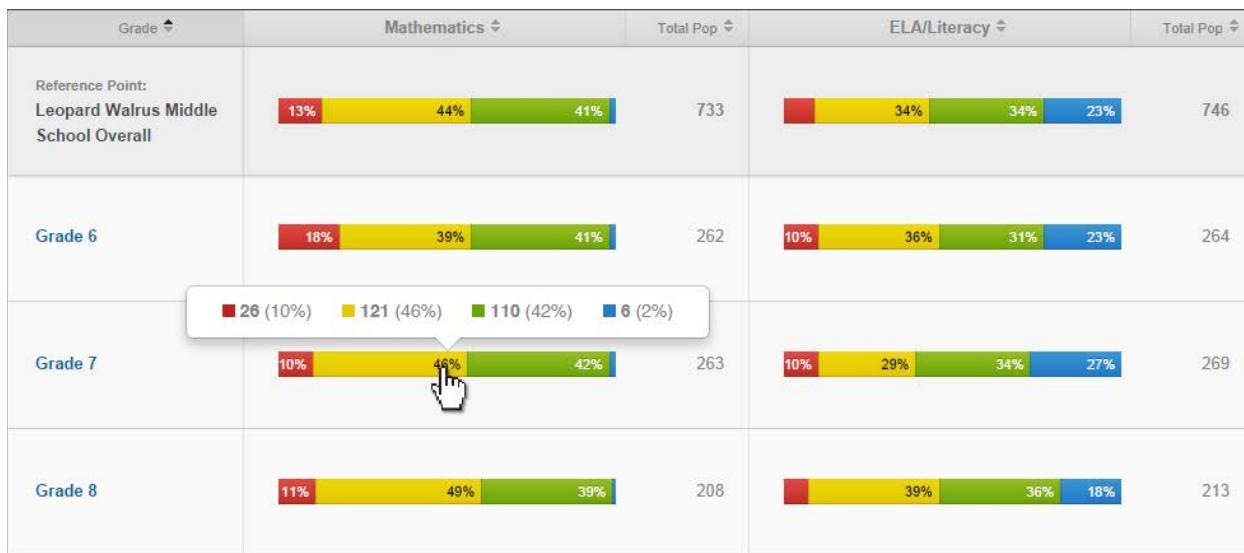


Figure 44 - Student population detail popup window

## Printing

The report can be printed directly using the built-in browser print command (Ctrl+P). The Results by Grade for a SCHOOL report also provides authorized users the ability to download the underlying summative assessment Individual STUDENT Reports in a batch PDF file for bulk printing (see Downloads).

## Language Support

The textual content of the Reporting System is available for viewing and printing in English by default, but users can select to view or print the content in either Spanish or Vietnamese.

## Student Privacy

This report contains no student personally identifiable information (PII). However, two rules have been instituted to protect student privacy on aggregate reports:

**Minimum Population Size** - States can configure a minimum population size for protecting privacy. If the number of students in an aggregate is lower than the minimum, users without PII authorization see this message: "Data suppressed to protect student privacy." By default, the minimum number is set to 11.

**Low Performance** - If all students in an aggregate have scored in Level 1 or 2, then users without PII authorization see this message: "Data suppressed to protect student privacy."

Authorization and permissions are set by each state and passed to the Reporting System when a user logs in to the system.

#### **1.1.4 Comparing Schools in a DISTRICT**

This report provides a list of schools for a given district and compares the academic achievement of students in each school to the district as a whole and to other schools in the district. Multi-colored bars display the percentage of assessed students in each achievement level on the most recent summative assessment, and the total number of students assessed in each school and in the district as a whole. Interim assessment results are not aggregated.

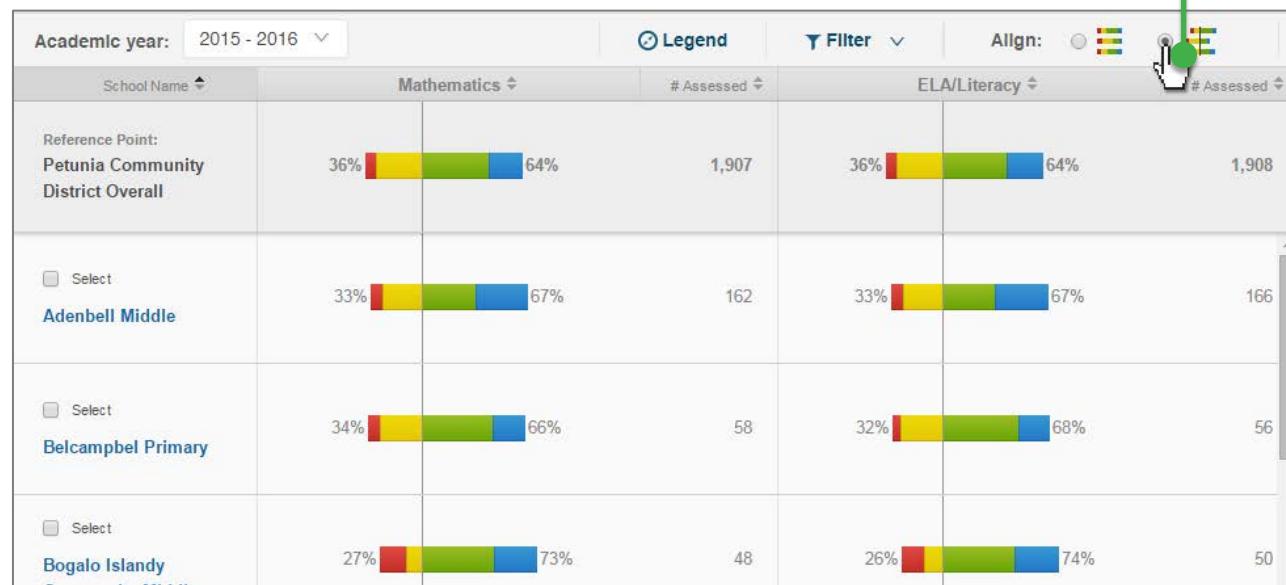
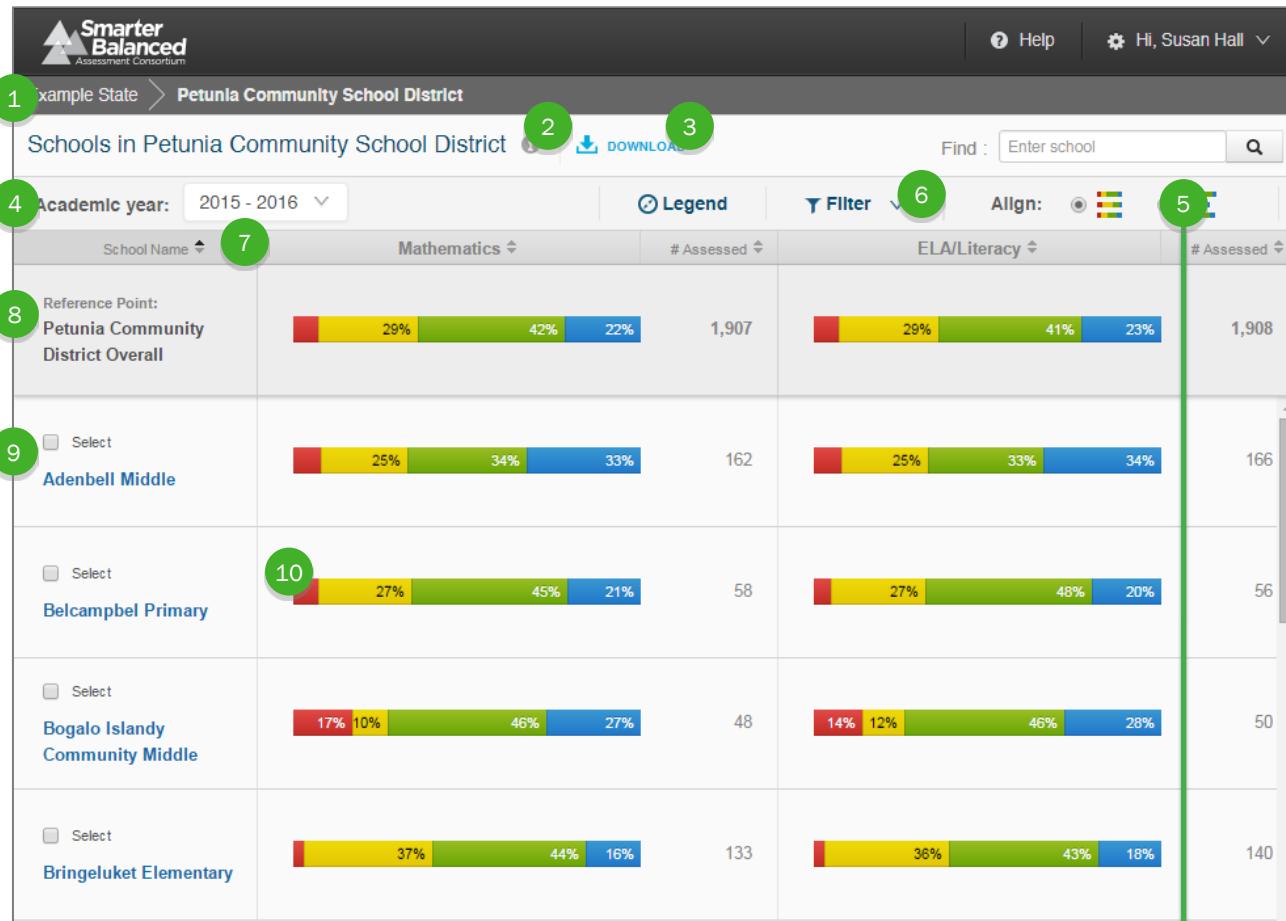


Figure 45 - Comparing Schools in a DISTRICT

## Report Features

- 1 **Breadcrumbs:** At the top of the page, users can navigate back to the state level report.
- 2 **Report Information:** Detailed report information regarding the report's purpose and its prospective uses is accessible by pausing on or clicking the "i" information icon next to the report's title.
- 3 **Download:** The **Download** button allows users to save the current page as a CSV file, or to download the underlying data for analysis.
- 4 **Academic Year Selector:** A dropdown list of all academic years for which there is available assessment data.
- 5 **Align:** The **Align** switch allows users to display results centered along the cut between achievement levels 2 and 3.
- 6 **Filter:** The **Filter** button opens a window that enables advanced filtering of student results by student demographic information.
- 7 **Column Sorting:** Column headers allow users to sort the list of grades by the values in each column.
- 8 **Reference Row:** Percentages and counts of students in each achievement level across the entire school.
- 9 **Select a School:** Checkboxes next to school names allow users to select specific schools for comparison or printing. Deselect All removes the selection.
- 10 **Achievement Level Aggregates:** Percentages and actual counts of students in each achievement level for each grade's summative assessment. Users can pause on the information to display the actual counts of students in each achievement level.

## Detailed Descriptions

### Navigation

- A user with appropriate permissions can access the Comparing Schools in a DISTRICT report by clicking the district's name in the Comparing Districts in a STATE report.
- A user can access the Comparing Schools in a DISTRICT report by clicking the school's name in the breadcrumb navigation of an Individual STUDENT Report, List of Students by Assessment GRADE report or Results by Grade for a SCHOOL report.
- A user can navigate from the Comparing Schools in a DISTRICT report to any Results by Grade for a SCHOOL report by clicking the school's name.
- A user can navigate back to the STATE report using the breadcrumbs on top.

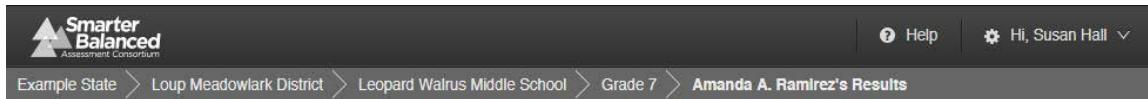


Figure 46 - Breadcrumb Navigation

- Users do not need PII access in order to see the Comparing Schools in a DISTRICT report, general access to the reporting system is sufficient.

## Selecting Assessment Results

- A user can see results for the summative assessment for any academic year for which there are available results via the Academic Year Selector. The options in the Academic Year Selector are based on all assessment results received by the Data Warehouse.
- This report **only** displays aggregations of summative results, not interim results.
- When a previous academic year is selected, the report displays a warning message alerting users that the results displayed are for a prior academic year's assessments.

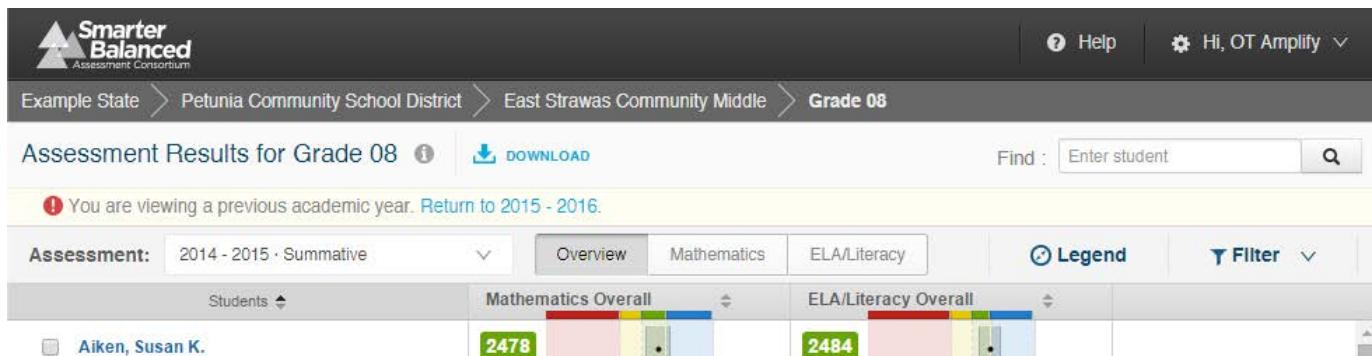


Figure 47 - Previous Year Warning Message

## Informational Popup Windows

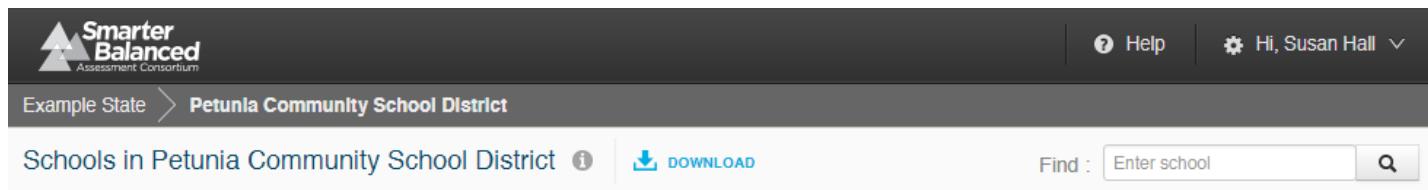


Figure 48 - Comparing Schools in a DISTRICT Information Indicators

Report Information and Legend are available by pausing on or clicking the respective icons.

The Report Information popup contains additional information about the purposes and proposed uses of the report. For the Comparing Schools in a DISTRICT report, the text is as follows:

## Purpose:

This report presents a view of student performance on the most recent summative assessment for each school in a selected district. For each school, the report displays the percentage of students in each achievement level and the number of students assessed.

## Uses:

- Use this report to compare overall school achievement within a district.
- Filter the view to analyze sub-groups within schools.

## Features:

- Align the visual display by the percentage of students in each achievement level or along the line between Level 2 and Level 3
- Sort results by any column
- Filter results by attributes (e.g., Gender, IEP, Economic Disadvantage)
- Download student assessment results for further analysis

The legend provides descriptions of all pictorial elements of the report, including Achievement Levels and the population bar. It appears as follows:

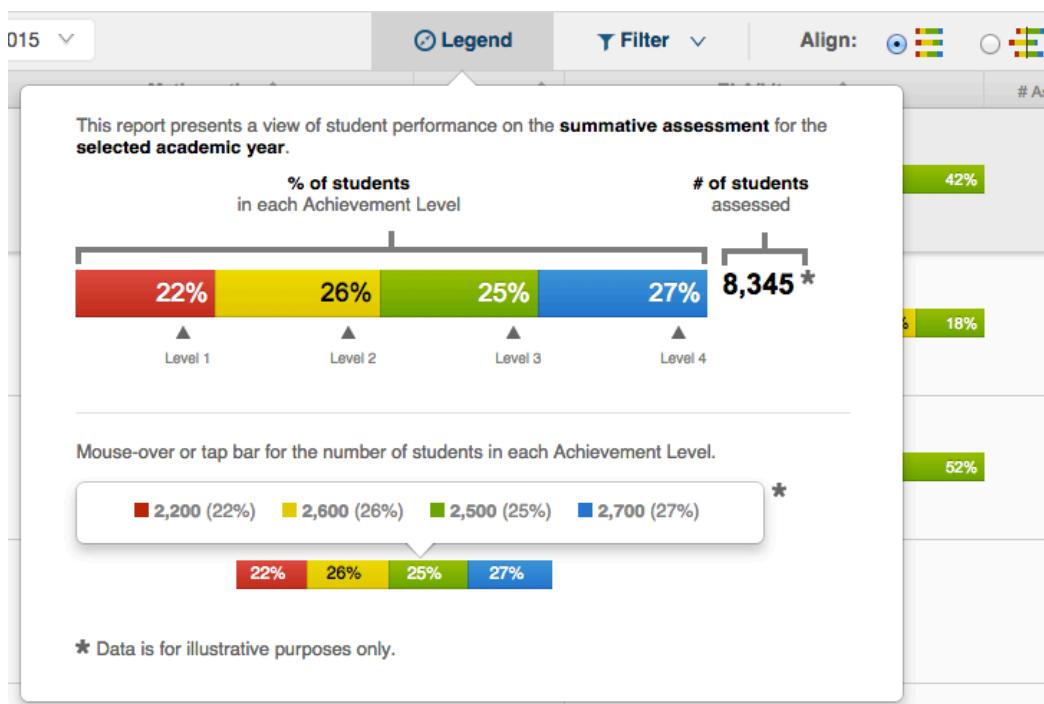


Figure 49 - Comparing Schools in a DISTRICT Legend

## Downloads

Download options are available by clicking the Download icon . There are several options for downloading information through the Comparing Schools in a DISTRICT report:

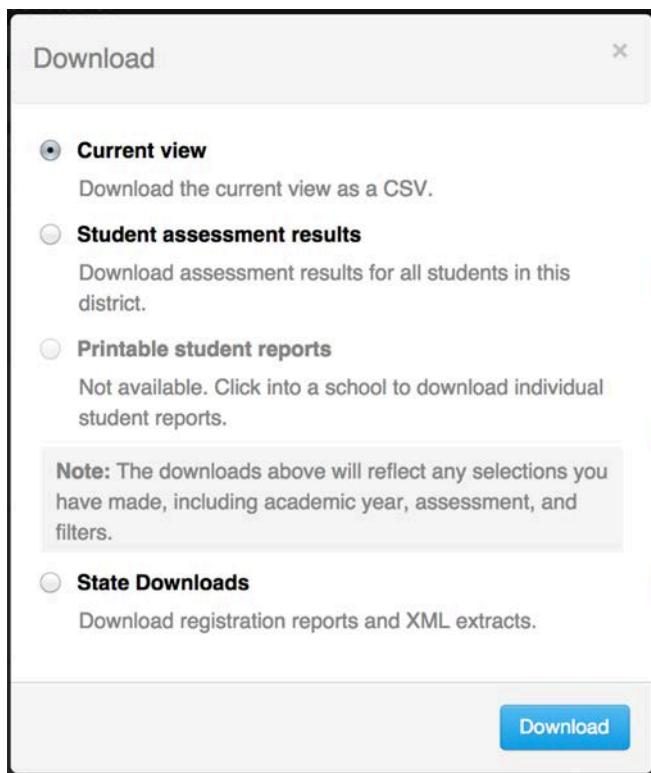


Figure 50 - Download Options Window

- Current View:** All users with access to this report can download a tabular version of the current view of summary data (students, scores, and achievement levels, including any active filters, sorting, or selection) in CSV format for accessibility or external analysis.
- Student Assessment Results:** A user with appropriate permissions can download the underlying Student Assessment Results for the students displayed on the report. If the district being viewed has only provided results of Interim assessments, this option is not available.
- Printable Student Reports:** This selection is not available at this level and appears dimmed.
- State Downloads:** A user with appropriate permissions can request state-level downloads (see below for further description).

## Locating Specific Schools

**Sorting** - A user can sort on any of the columns (school Name, mathematics overall results, number of students assessed in mathematics, ELA/literacy overall results, and number of students assessed in ELA/literacy). A single click sorts either alphabetically (for name) or from lowest to highest, and a second click reverses the sort order.

**Filtering** - A user can filter the results by demographic subgroups for in-depth analysis of those results.

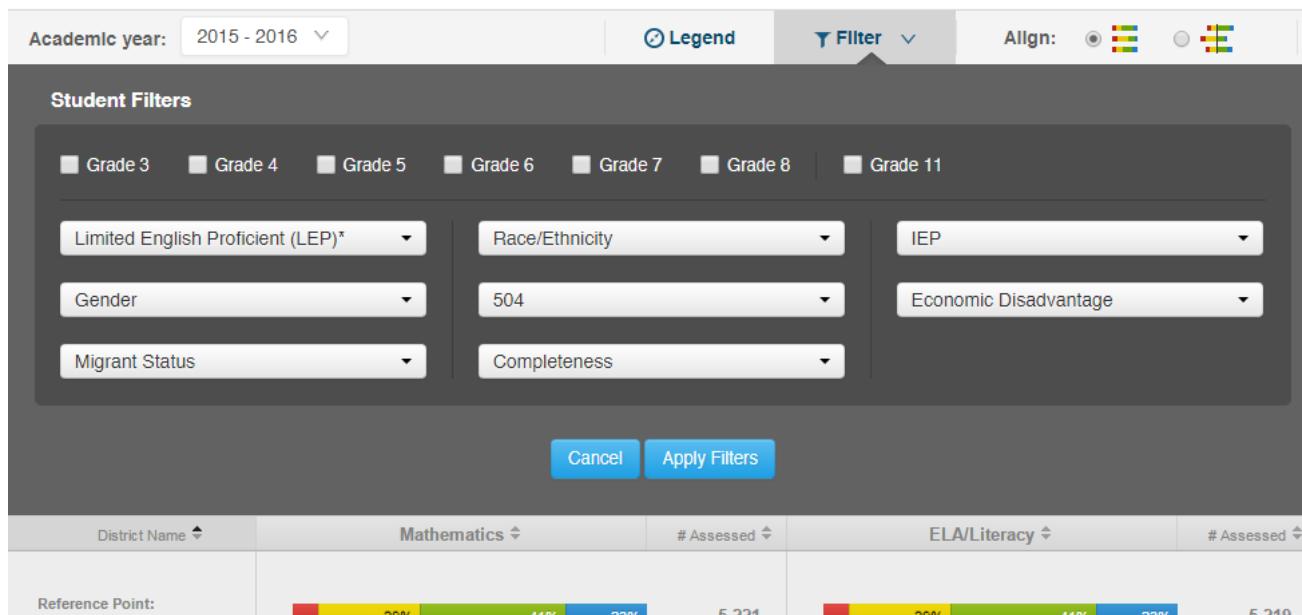


Figure 51 - Results by Grade for a SCHOOL Filter Options

Selecting multiple options in a filter (e.g., Hispanic/Latino and Two or More Races from Race/Ethnicity) returns aggregates composed of any students in either group (OR selection or Union). Selecting options in more than one filter (e.g., Yes under Economic Disadvantage and Yes under Migrant Status) returns a list of students who fit into both groups (AND selection or Intersection).

**Find a School** - A user can click into the Find box, or use the browser “find” command (Ctrl+F), to type in a part or whole name of a school. The report scrolls down to the first entry matching the search string and provides controls to navigate through any matching entries.

**Select specific schools** - Each school in the list has a checkbox next to its name to narrow the list. A user can select specific schools to compare them to one another or create a custom list for downloading or printing.

## Align

Achievement Level proportion bars can be either aligned by endpoints, or centered on the cut between levels 2 and 3. A user can click the **Align** button to toggle between the two options.



Figure 52 - Align Feature

## Achievement Level Counts

Pausing on an Achievement Level bar displays numbers of students and percentages by Achievement Level for each level.

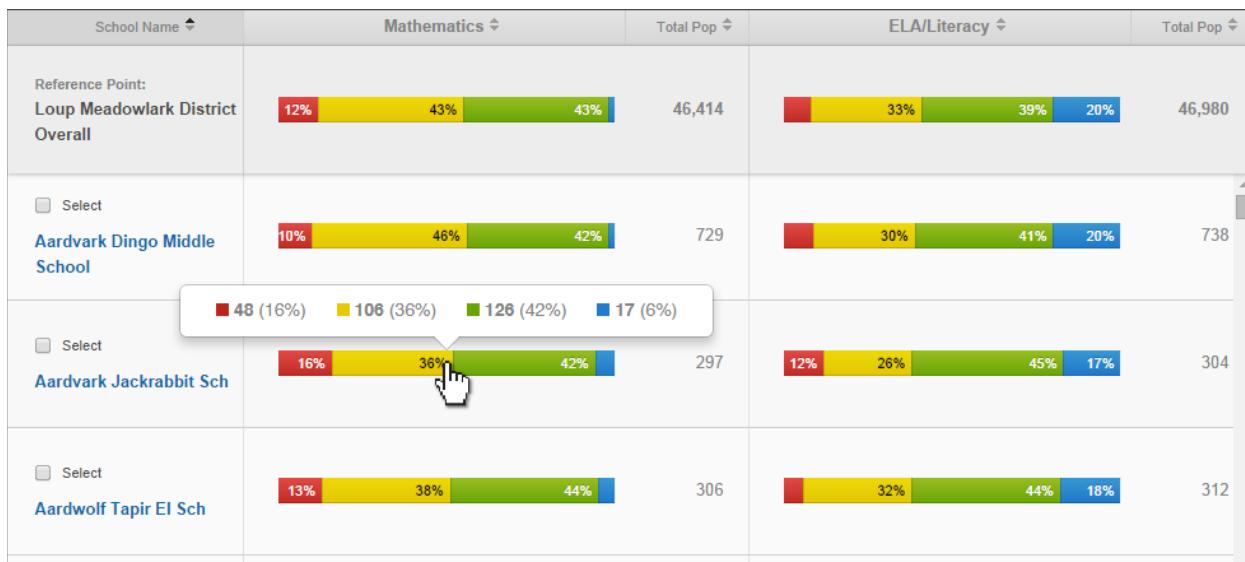


Figure 53 - Student population detail popup window

## Printing

The report as displayed can be printed directly using the built-in browser print command (Ctrl+P).

## Language Support

The textual content of the Reporting System is available for viewing and printing in English by default, but users can select to view or print the content in either Spanish or Vietnamese.

## Student Privacy

This report contains no student personally identifiable information (PII). However two rules have been instituted to protect student privacy on aggregate reports:

**Minimum Population Size** - States can configure a minimum population size for protecting privacy and if the number of students in an aggregate is lower than the minimum, users without PII authorization see this message: "Data suppressed to protect student privacy." By default, the minimum number is set to 11.

**Low Performance** - If all students in an aggregate have scored in Level 1 or 2, then users without PII authorization see this message: "Data suppressed to protect student privacy."

Authorization and permissions are set by each state and passed to the Reporting System when a user logs in to the system.

## 1.1.5 Comparing Districts in a STATE

This report provides a list of districts for a given state and compares the academic achievement of students in each district to the state as a whole and to other districts in the state. Multi-colored bars display the percentage of assessed students in each achievement level on the most recent summative assessment, and the total number of students assessed in each district and in the state as a whole. Interim assessment results are not aggregated.

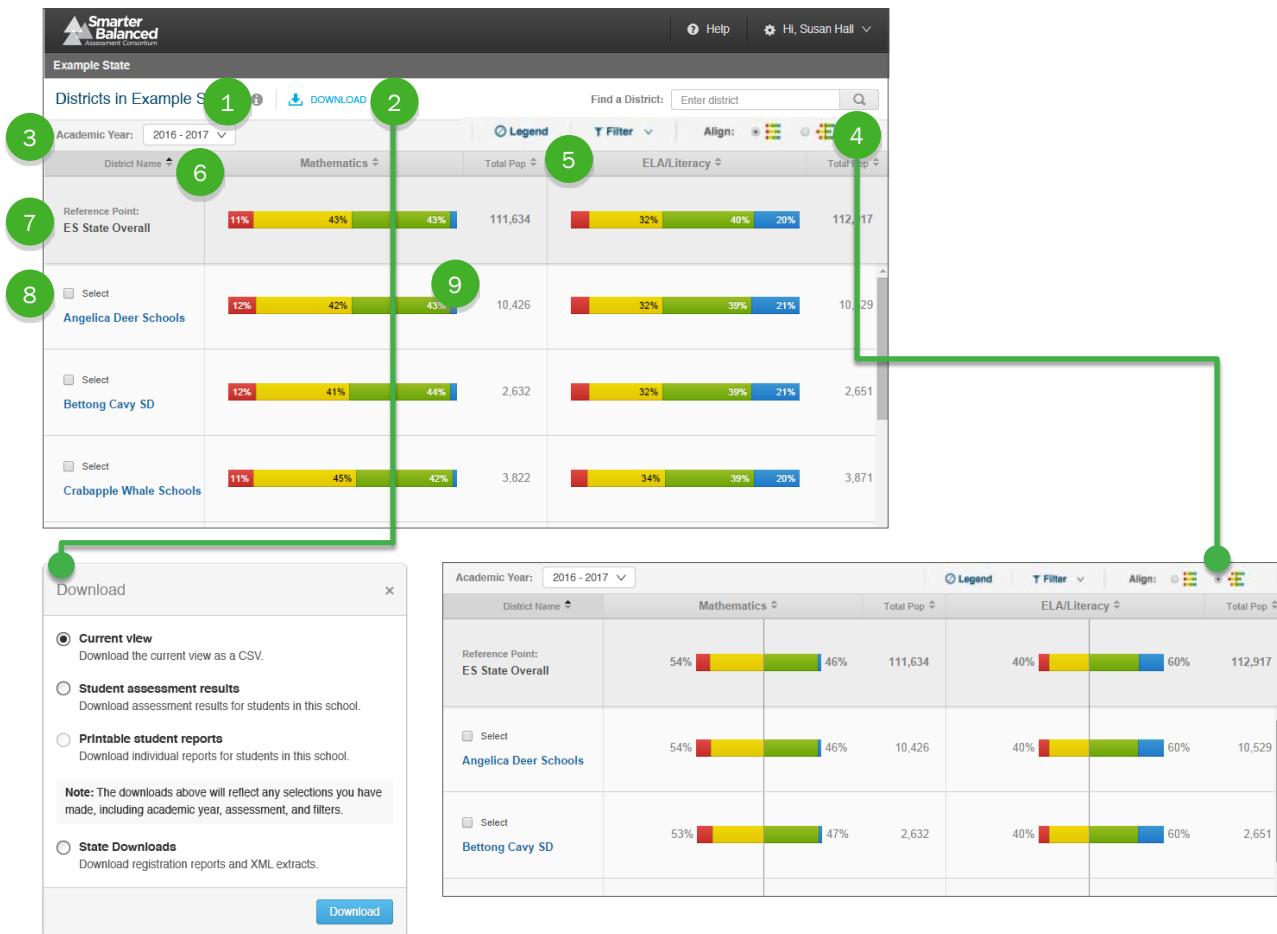


Figure 54 - Comparing Districts in a STATE

## Report Features

- 1 **Report Information:** Detailed report information regarding the report's purpose and its prospective uses is accessible by pausing on or clicking the "i" information icon next to the report's title.
- 2 **Download:** The **Download** button allows users to save the current page as a CSV file, or to download the underlying data for analysis.
- 3 **Academic Year Selector:** A dropdown list of all academic years for which there is available assessment data.
- 4 **Align:** The **Align** switch allows users to display results centered along the cut between achievement levels 2 and 3.
- 5 **Filter:** The **Filter** button opens a window that enables advanced filtering of student results by student demographic information.
- 6 **Column Sorting:** Column headers allow users to sort the list of districts by the values in each column.
- 7 **Reference Row:** Percentages and counts of students in each achievement level across the entire district.
- 8 **Select a District:** Checkboxes next to district names allow users to select specific districts for comparison or printing. "Deselect All" removes the selection.
- 9 **Achievement Level Aggregates:** Percentages and actual counts of students in each achievement level for each district. Users can pause on the information to display the actual counts of students in each achievement level.

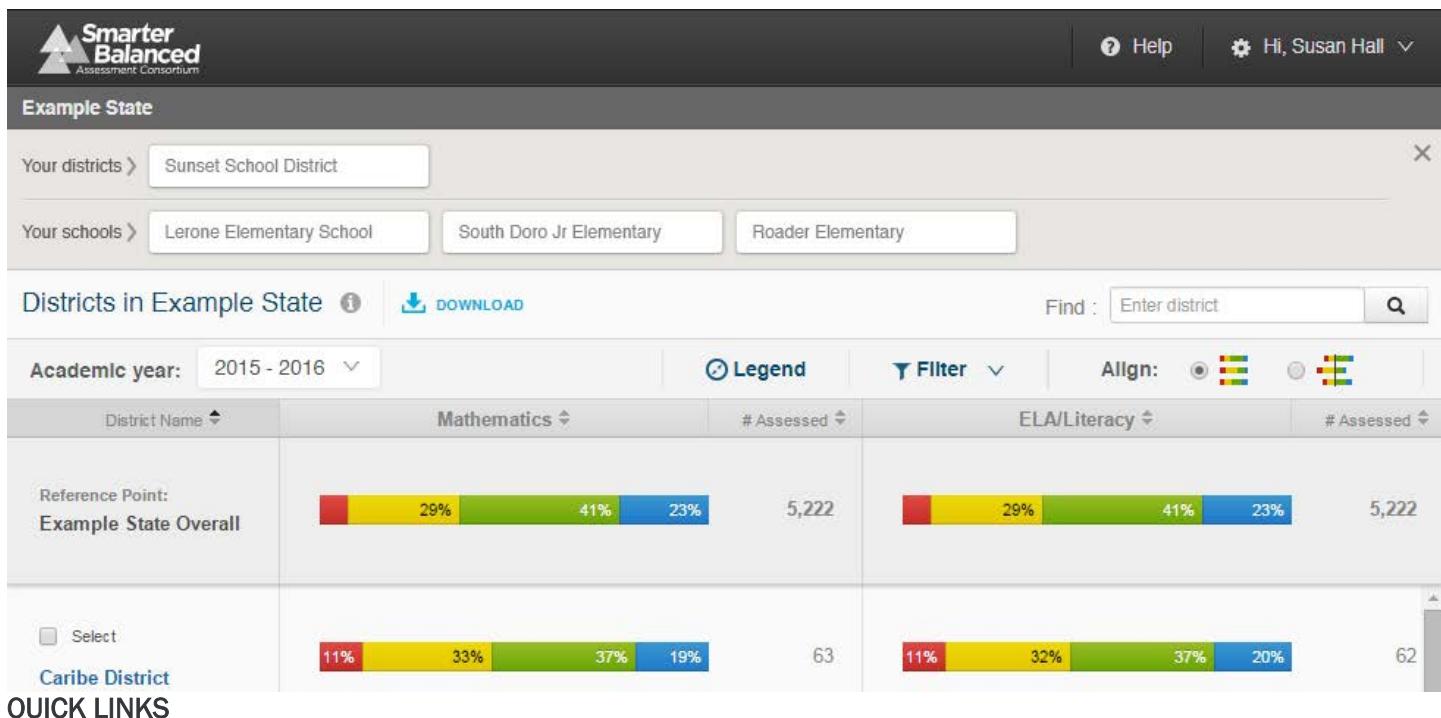
## Detailed Descriptions

### Navigation

- A properly permissioned state user can see the Comparing Districts in a STATE report for his or her state after logging in to the Data Warehouse and Reporting System.
- A user can access the Comparing Schools in a DISTRICT report by clicking the school's name in the breadcrumb navigation of an Individual STUDENT Report, List of Students by Assessment GRADE report, Results by Grade for a SCHOOL report, or Comparing Schools in a DISTRICT report.
- A user can navigate from the Comparing Districts in a STATE report to any Comparing Schools in a DISTRICT report by clicking the district's name.
- Users do not need PII access in order to see the Comparing Districts in a STATE report, but they must be authorized by their state to see state results.

### Quick Links

- Users who are provisioned with PII access to one or more schools in the Smarter Balanced access provisioning system will be able to navigate directly to their school or district through Quick Links that appear at the top of the Comparing Districts in a STATE report.



- The schools and districts where the user has had access provisioned will appear as links on the top of the screen. Clicking on a district will navigate the user directly to the Comparing Schools in a DISTRICT report for that district; clicking on a school name will navigate the user directly to the Comparing Grades in a SCHOOL report for that school.
- Links will appear for every school where a user has PII access and for the districts that those schools belong to. Links to up to eight schools and eight districts may appear in the links section. If a user is provisioned to more than eight individual schools in a single district, only the district name will be linked. If a user is provisioned to more than eight individual districts, only the first eight (alphabetically) will appear.
- Users may close the links section if they want to see more of the report and open it again for ease of navigation.

## Selecting Assessment Results

- A user can see results for the summative assessment for any academic year for which there are available results via the Academic Year Selector. The options in the Academic Year Selector are based on all assessment results received by the Data Warehouse.
- This report only displays aggregations of summative results, not interim results.
- When a previous academic year is selected, the report displays a warning message alerting users that the results displayed are for a prior academic year's assessments.

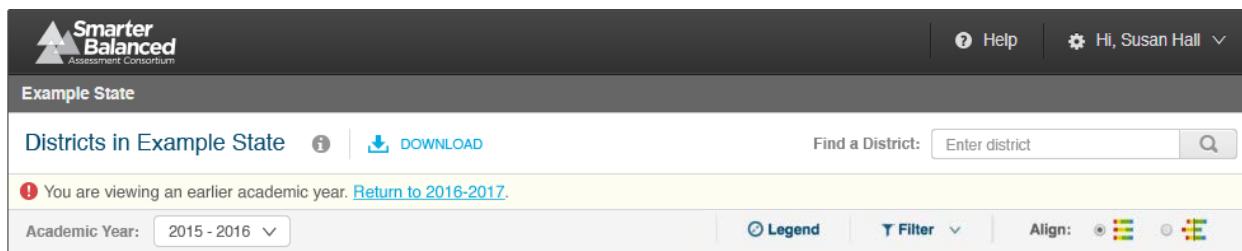


Figure 55 - Previous Year Warning Message

## Informational Popup Windows

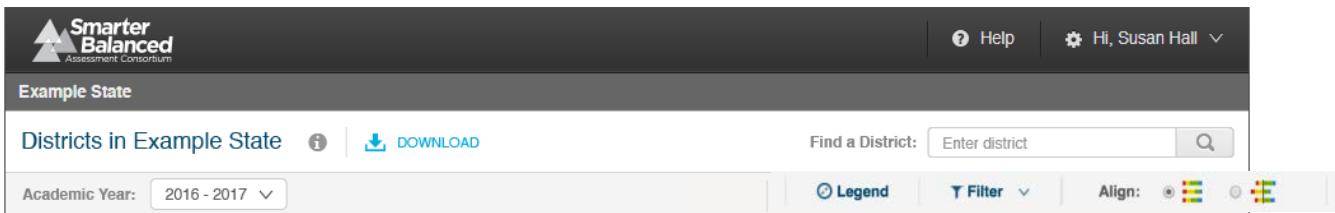


Figure 56 - Comparing Schools in a DISTRICT Information Indicators

Report Information and Legend are all available by pausing on or clicking the respective icons.

The Report Information popup contains additional information about the purposes and proposed uses of the report. For the Comparing Districts in a STATE report, the text is as follows:

### Purpose:

This report presents a view of student performance on the most recent summative assessment for each district in a state. For each district, the report displays the percentage of students in each achievement level and the number of students assessed.

### Uses:

- Use this report to compare overall district achievement within a state.
- Filter the view to analyze sub-groups within districts.

### Features:

- Align the visual display by the percentage of students in each achievement level or along the line between Level 2 and Level 3
- Sort results by any column
- Filter results by attributes (e.g., Gender, IEP, Economic Disadvantage)
- Download student assessment results for further analysis



The legend provides descriptions of all pictorial elements of the report, including Achievement Levels and the population bar. It appears as follows:

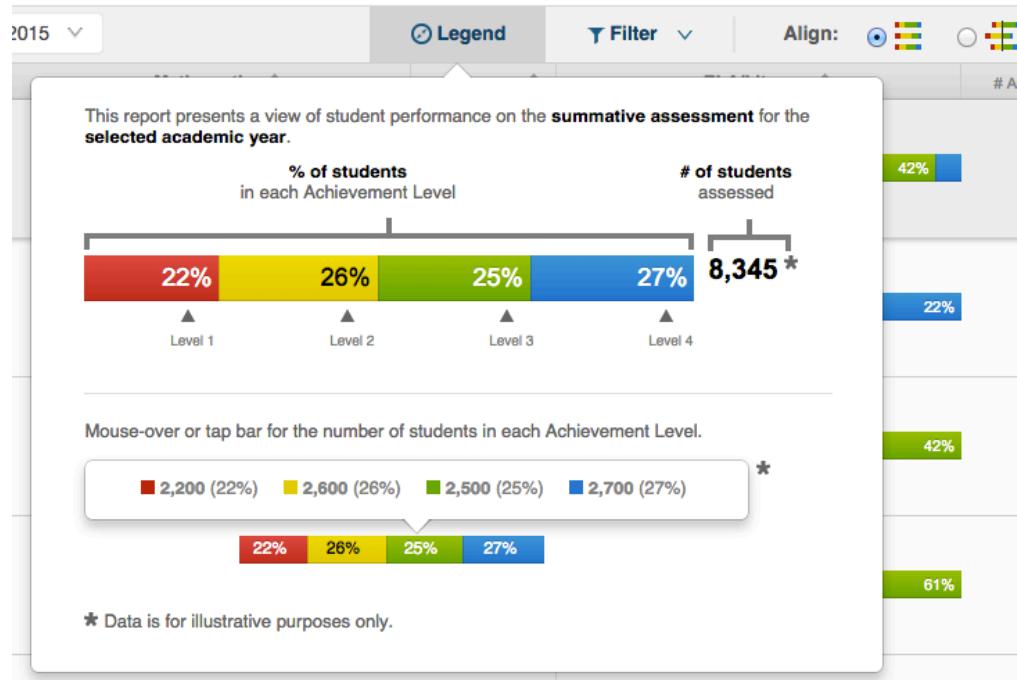


Figure 57 - Comparing Districts in a STATE Legend

## Downloads

Download options are available by clicking the Download icon . There are several options for downloading information through the Comparing Districts in a STATE report:

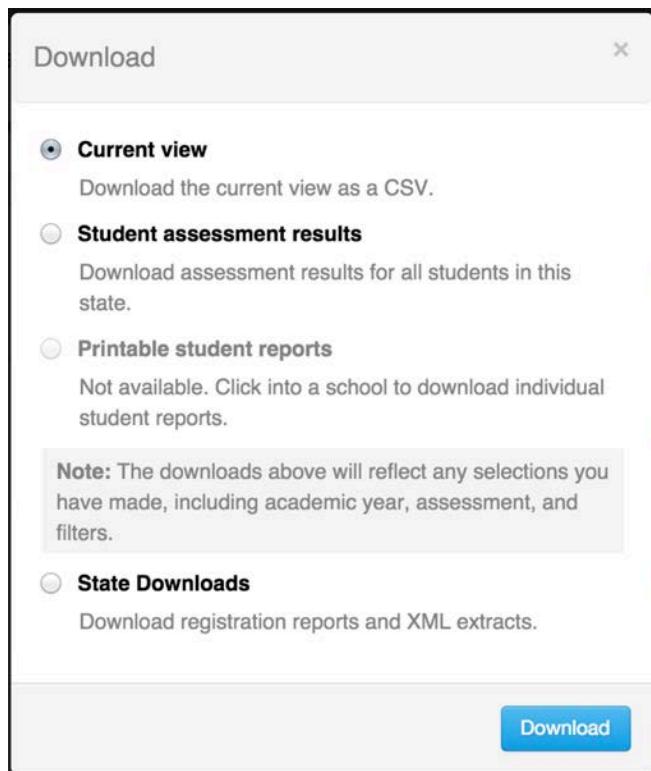


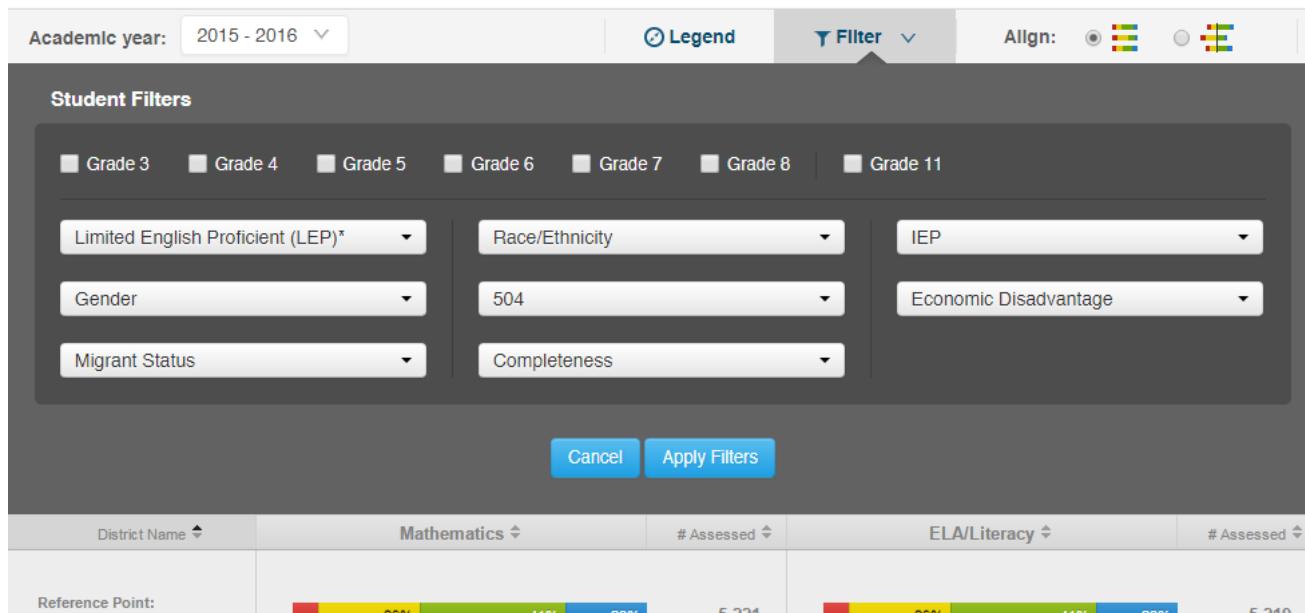
Figure 58 - Download Options Window

- Current View:** All users with access to this report can download a tabular version of the current view of summary data (achievement levels, including any active filters, sorting, or selection) in CSV format for accessibility or external analysis.
- Student Assessment Results:** A user with appropriate permissions can download the underlying Student Assessment Results for all the districts displayed on the report. If the state has only provided results of Interim assessments, this option is not available.
- Printable Student Reports:** This option is not available at this level and appears dimmed.
- State Downloads:** A user with appropriate permissions can request state-level downloads (see below for further description).

## Locating Specific Districts

**Sorting** - A user can sort on any of the columns (school name, mathematics overall results, number of students assessed in mathematics, ELA/literacy overall results, number of students assessed in ELA/literacy). A single click sorts either alphabetically (for name) or from lowest to highest, and a second click reverses the sort order.

**Filtering** - A user can filter the results by demographic subgroups, or by Completeness for in-depth analysis of results.



District Name	Mathematics	# Assessed	ELA/Literacy	# Assessed
Reference Point:	<span style="color: red;">20%</span> <span style="color: yellow;">30%</span> <span style="color: green;">40%</span> <span style="color: blue;">30%</span>	5,231	<span style="color: red;">20%</span> <span style="color: yellow;">30%</span> <span style="color: green;">40%</span> <span style="color: blue;">30%</span>	5,210

Figure 59 - Results by Grade for a SCHOOL Filter Options

Selecting multiple options in a filter (e.g., Hispanic/Latino and Two or More Races from Race/Ethnicity) returns aggregates composed of any students in either group (OR selection or Union). Selecting options in more than one filter (e.g., Yes under Economic Disadvantage and Yes under Migrant Status) returns a list of students who fit into both groups (AND selection or Intersection).

**Find a District** - A user can click into the Find box or use the browser **Find** command (Ctrl+F) to type in a part or whole name of a district. The report scrolls down to the first entry matching the search string and provides controls to navigate through any matching entries.

**Select Specific Districts** - Each district in the list has a checkbox next to its name to narrow the list. A user can select specific districts to compare them to one another or create a custom list for downloading or printing.

## Align

Achievement Level proportion bars can be either aligned by endpoints or centered on the cut between levels 2 and 3. A user can click the **Align** button to toggle between the two options.

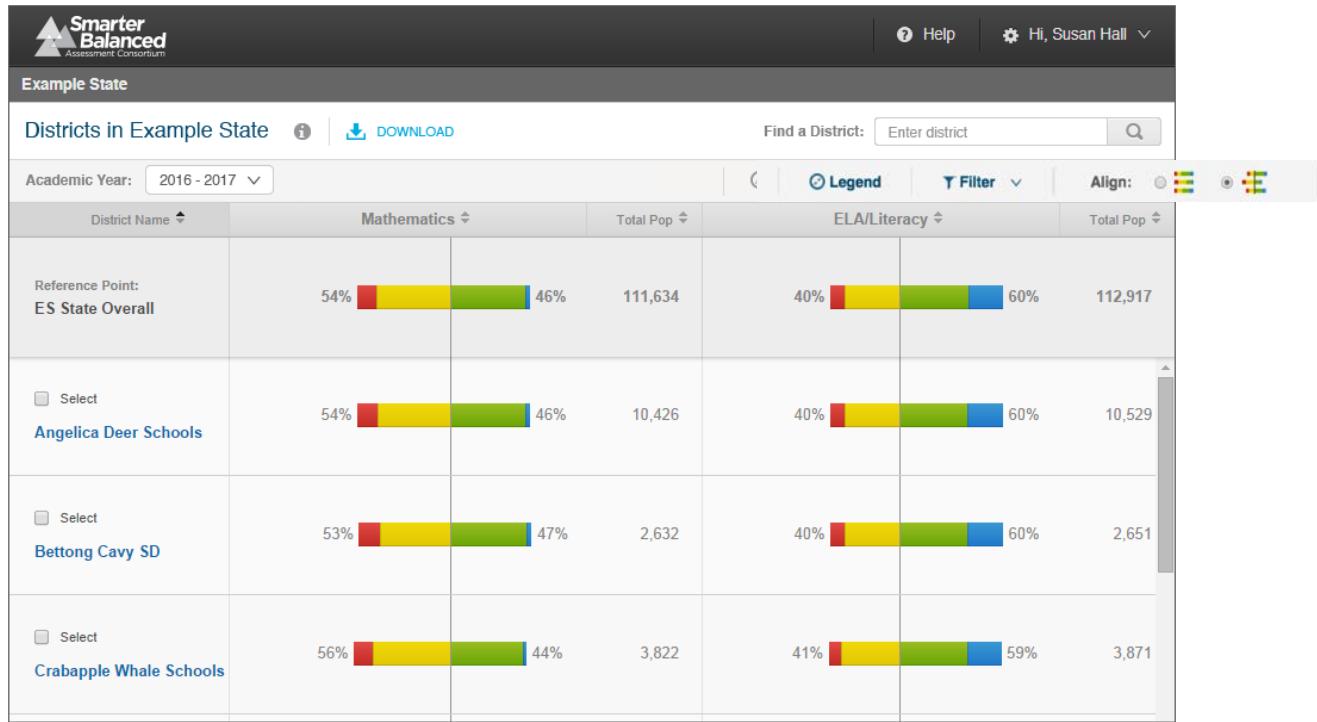


Figure 60 - Align Feature

## Achievement Level Counts

Pausing on an Achievement Level bar displays numbers of students and percentages by Achievement Level for each level.

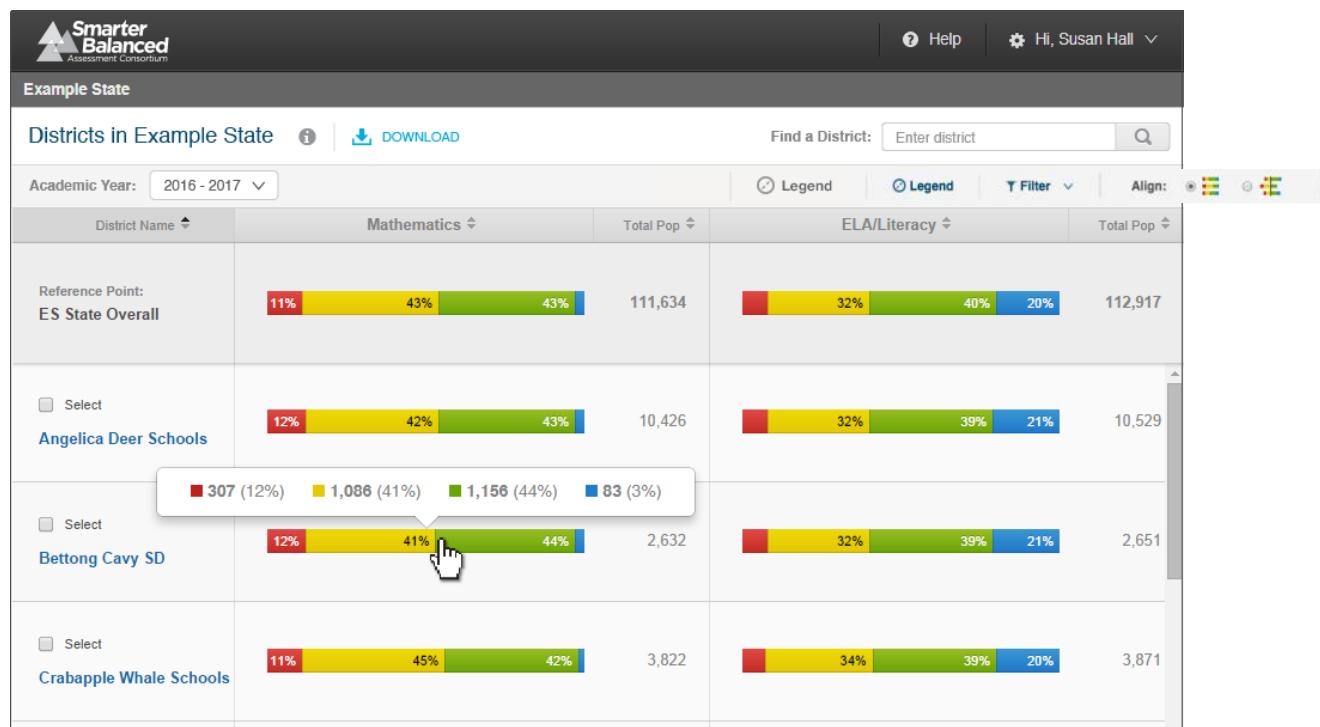


Figure 61 - Student population detail popup window

## Printing

The report as displayed can be printed directly using the built-in browser print command (Ctrl+P).

## Language Support

The textual content of the Reporting System is available for viewing and printing in English by default, but users can select to view or print the content in either Spanish or Vietnamese.

## Student Privacy

This report contains no Student personally identifiable information (PII). However two rules have been instituted to protect student privacy on aggregate reports:

**Minimum Population Size** - States can configure a minimum population size for protecting privacy, and, if the number of students in an aggregate is lower than the minimum, users without PII authorization see this message: "Data suppressed to protect student privacy." By default, the minimum number is set to 11.

**Low Performance** - If all students in an aggregate have scored in Level 1 or 2, then users without PII authorization see this message: "Data suppressed to protect student privacy."

Authorization and permissions are set by each state and passed to the Reporting System when a user logs in to the system.

## Data Downloads

In addition to the predesigned reports, the reporting system offers authorized users the ability to download data for distribution or further review and analysis in external systems.

This section describes the different types of downloads in detail.

ID	Download Name
2.2.1	Student Assessment Results
2.2.2	Printable Student Reports
2.2.3	State Downloads: Overview
2.2.4	State Download: Student Registration Statistics
2.2.5	State Download: Assessment Completion Statistics
2.2.6	State Download: Audit XML
2.2.7	State Download: Individual Item Response Data

Table 2 - List of Data Downloads

### 1.1.6 Student Assessment Results

#### Description

This is a bulk download of the assessment results for the selected assessment, with one row per student-assessment. The resulting files contain all of the data for Overall and Claim scores (e.g., scale score, error band, level determination), as well as all the student data (e.g., demographics, grade/school/district/state attribution, etc.) for the specific summative or interim assessment being viewed.

This download may be requested by a state administrator as a statewide bulk extract, but is also implemented for Educators and Administrators with PII access, at the DISTRICT, SCHOOL, and GRADE levels. If the user is viewing a report that only displays summative data (i.e. an aggregate report), and the state, district or school has not provided summative data, this download will be disabled.

#### Assessments

This download is available for summative and interim comprehensive assessments.

#### Primary Audiences

This download is primarily intended for state administrators, district administrators, principals, and teachers.

#### Navigation

Users who are authorized and have the proper permissions can request this download through the Download interface.

A status window then informs users they will receive an email with a secure URL from which to download the file, and the link to the secure URL itself.

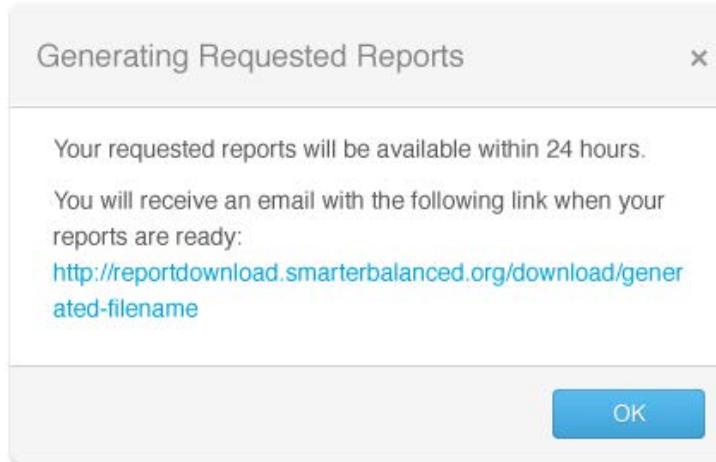


Figure 62 - Download Confirmation Window

When the generated files are ready for download, users will receive the following email:

Your requested reports are now available for download. Please click the following link to access your secure files:

<http://reportdownload.smarterbalanced.org/download/generated-filename>

This link will expire in 7 days.

This email was sent from a notification-only email address that cannot accept incoming email. Please do not reply to this message.

Clicking the URL allows the user who made the request to download a zip file with the requested student extract in CSV format.

## Features

- This download is supported at the STATE, DISTRICT, SCHOOL, and GRADE level; the two lowest levels are executed synchronously, while the larger downloads for district and state leverage the HTTPS Pickup Zone.
- This download request generates file pairs for each assessment, where a summative assessment is defined by Academic Year, Grade, and Subject, and an interim comprehensive assessment is defined by the Academic Year, Grade, Subject, and administration window.
- The file pair is composed of 1) a large CSV containing all of the assessment results data directly reported on by the Reporting System and 2) a JSON metadata file that includes all repetitive data common to all assessment results.

## PII Protection

- Access to the Download interface is restricted to authorized users with the proper system permissions. Requests may be made via the user interface or by a system-to-system API call.
- Once a request is made, the process is asynchronously executed and the output uploaded to the HTTPS Pickup Zone, where it can be retrieved by the requesting user.
- All SCHOOL and GRADE extracts are protected by PII access rules.

## Data Summary

The Student Assessment Results data specification format is published in detail to:

<http://www.smarterapp.org/documents/DataWarehouse-Spec-StudentAssessments.pdf>

### 1.1.7 Printable Student Reports

This download option is available from the List of Students by Assessment GRADE report and the Results by Grade in a SCHOOL report. The option is disabled on the Comparing Schools in a DISTRICT report and the Comparing Districts in a STATE report. On the Results by Grade in a SCHOOL report, the option is only available if the school has provided summative assessment results.

#### Purpose

The purpose of this download is to provide educators with the ability to download and print batches of individual student reports at once. This feature enables a teacher to print out all of or some of his or her students' individual student reports and a school administrator to print out an entire school's individual student reports at once. For summative and interim comprehensive assessment results, a student's report is approximately three pages; one page for mathematics, one page for ELA/literacy, and one page for reference material, e.g. Report Information and Legend.

#### Navigation

A user selects the **Printable Student Reports** option from the Download popup window.

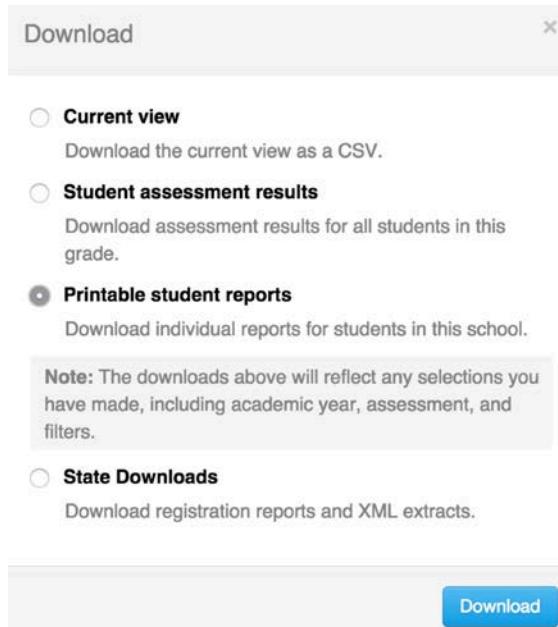


Figure 63 - Download Popup Window

The system then displays a second popup window that requires users to specify whether they want to print out in grayscale or color and whether they want the reports to print out in English, Spanish, or Vietnamese.

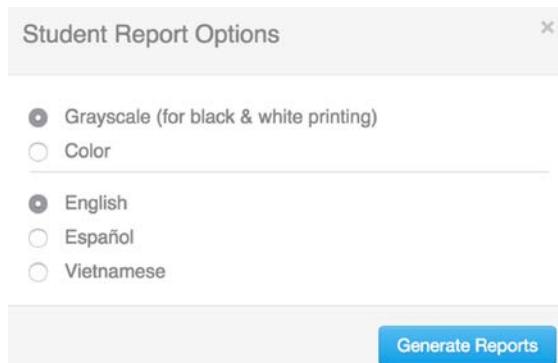


Figure 64 - Download Printable Student Report Options

A status window then informs users they will receive an email with a secure URL from which to download the file, and the link to the secure URL itself.

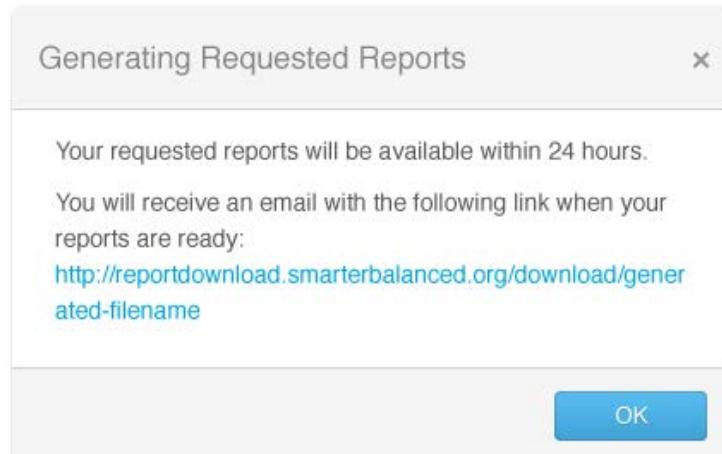


Figure 65 - Download Confirmation Window

When the generated files are ready for download, users will receive the following email:

Your requested reports are now available for download. Please click the following link to access your secure files:  
<http://reportdownload.smarterbalanced.org/download/generated-filename>

This link will expire in 7 days.

This email was sent from a notification-only email address that cannot accept incoming email. Please do not reply to this message.

Clicking the URL allows the user who made the request to download a zip file with the requested individual student reports in PDF format. When the user opens the file, the first page includes the name of the school, grade, number of pages, number of students, name of requestor, and date.

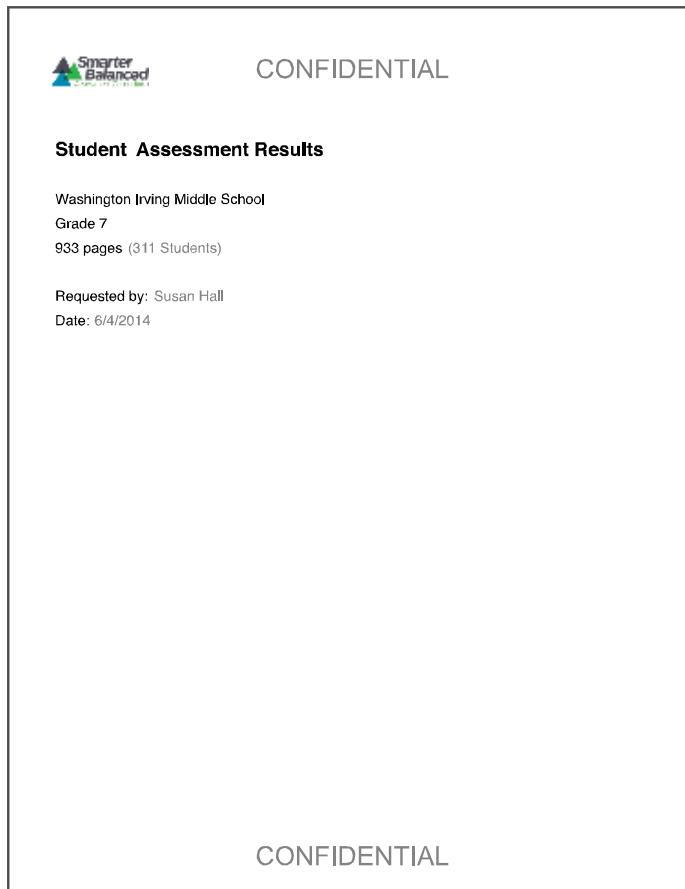


Figure 66 - Printable Student Reports Cover Page

### Size Constraints

In the event that a single batch request contains more than 1,000 students, it is divided into separate files that are made available to the user to download. Each PDF starts with a cover page that includes all the above information, but also indicates how the system has divided the request into files, the place of each file within the larger batch (e.g., Part 1 of 3), and the names of the first and last student in this file.

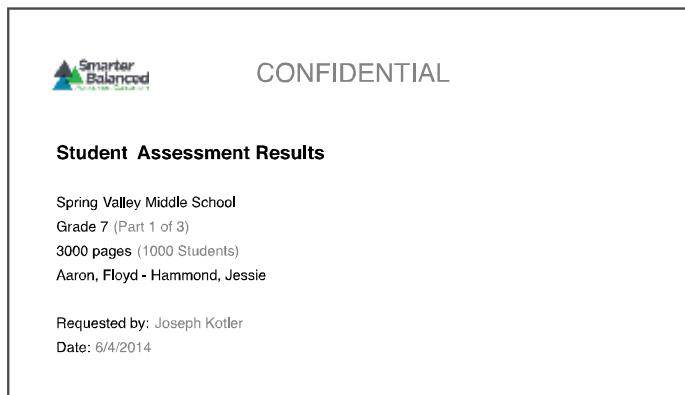


Figure 67 - Printable Student Reports Segment Cover Page

### 1.1.8 State Downloads: Overview

For users with the appropriate state-level permissions, the system displays the **State Downloads** option in the Download popup window.

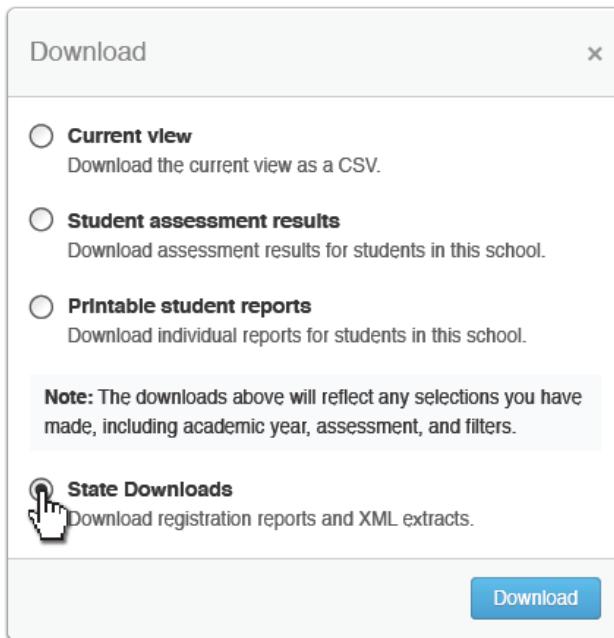


Figure 68 - Download Popup Window

When selected, this option presents the user with a second popup window.

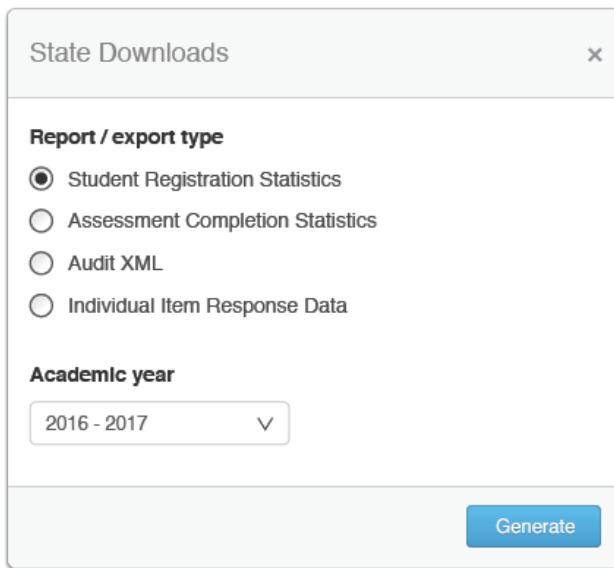


Figure 69 - State Download selector

Each of these options is discussed in detail below.

### 1.1.9 State Download: Student Registration Statistics

#### Description

This download provides a registering entity (i.e., a state or district) with a list of current year registration statistics, previous year registration statistics, and the differences between them, broken down by district and school. This should enable the registering entity to discern broad shifts in registration patterns and determine if there were errors in the current year's registration process.

#### Assessments

This download shows statistics of registration records for a specified academic year and compares them to those of previous years. Registration records are not constrained by assessment types.

#### Primary Audiences

This download is primarily intended for Consortium, state, and district administrators.

#### Navigation

Users who are authorized and have proper permissions can request this download through the Download interface by selecting **Student Registration Statistics**, an academic year, and clicking the **Generate** button.

A status window then informs users they will receive an email with a secure URL from which to download the file, and the link to the secure URL itself.

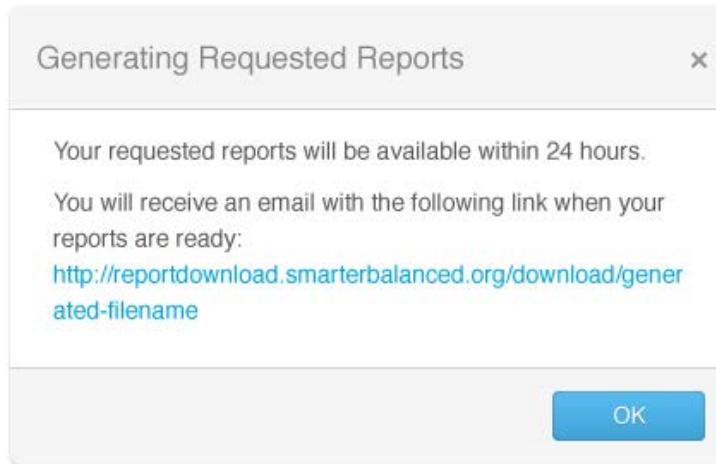


Figure 70 - Download Confirmation Window

When the generated files are ready for download, users will receive the following email:

Your requested reports are now available for download. Please click the following link to access your secure files:

<http://reportdownload.smarterbalanced.org/download/generated-filename>

This link will expire in 7 days.

This email was sent from a notification-only email address that cannot accept incoming email. Please do not reply to this message.

## Features

- This download provides a list of districts and schools for a given data tenant, with columns for previous year data, current year data, and the difference between them. Data include overall counts, percentages, and deltas for all demographic and program attributes used for disaggregation.
- Users can see if the differences between the previous and the current year fall within acceptable parameters for their state or district.
- Users can then correct data errors in the source registration system.

## PII Protection

- Access to the Download interface is restricted to authorized users with the proper system permissions. Requests may be made via the user interface or by a system-to-system API call.
- Once a request is made, the process is asynchronously executed and the output uploaded to the HTTPS Pickup Zone, where it can be retrieved only by the requesting user.
- After a certain number of days (configurable by state), the retrieval URL is disabled. By default, the number of days is 7.

## Data Summary

The Student Registration Statistics download includes summary data for each school, district, and the state.

For a download summary for the 2016 Academic Year, the columns calculated based on Student Registration data are:

- State
- District
- School
- Category\*
- Value\*
- AY2015 Count
- AY2015 Percent of Total

- AY2016 Count
- AY2016 Percent of Total
- Change in Count
- Percent Difference in Count
- Change in Percent of Total
- AY2016 Matched IDs to AY2015 Count
- AY2016 Matched IDs Percent of AY2015 Count

\* - Category and Value define disaggregates of interest, resulting in 28 rows per school, district, and state:

Category	Value
Total	Total
Sex	Male
Sex	Female
Ethnicity	HispanicOrLatinoEthnicity
Race	AmericanIndianOrAlaskaNative
Race	Asian
Race	BlackOrAfricanAmerican
Race	NativeHawaiianOrOtherPacificIslander
Race	White
Race	DemographicRaceTwoOrMoreRaces
Program	IDEAIndicator
Program	LEPStatus
Program	504Status
Program	EconomicDisadvantageStatus
Program	MigrantStatus
Grade KG	Total
Grade 01	Total
Grade 02	Total
Grade 03	Total
Grade 04	Total
Grade 05	Total
Grade 06	Total
Grade 07	Total
Grade 08	Total
Grade 09	Total
Grade 10	Total
Grade 11	Total
Grade 12	Total

Table 3 - Student Registration Statistics disaggregation

## Assumptions

- 1) In Year 1, this report does not have previous year data for comparison, so users have to review actual counts and percentages and discount the calculated deltas.
- 2) Student Registration Statistics does not report on individual anomalies, but rather at the aggregate level for aggregate attributes of interest. Individual registration validation is done by the registering entity at registration time.
- 3) Data are provided as a downloadable file in CSV format.

### 1.1.10 State Download: Assessment Completion Statistics

#### Description

While the Test Delivery System provides real-time assessment progress and completion reporting, the Data Warehouse provides historical reporting on assessment completion. For a specified assessment administration, this download provides counts of registered and assessed students and percentages of students assessed. This enables an administrator to review how many of the registered students have been assessed.

#### Assessments

This download shows completion statistics for summative or interim comprehensive assessments.

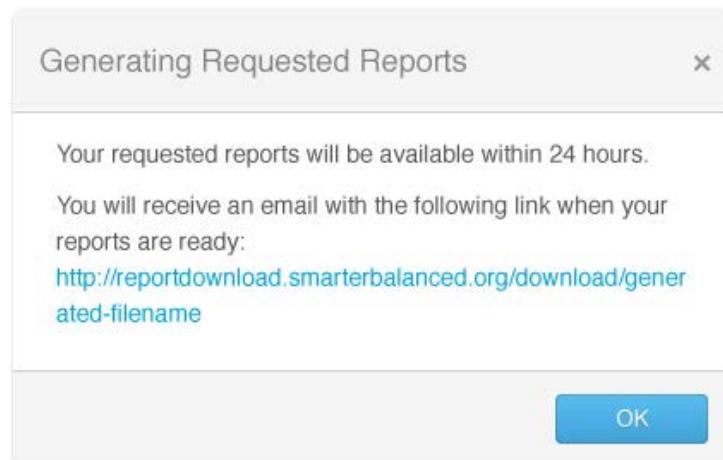
#### Primary Audience

This download is intended primarily for Consortium administrators, but may also be used by state and district administrators.

#### Navigation

Users who are authorized and have proper permissions can request this download through the Download interface by selecting **Assessment Completion Statistics**, an academic year, and clicking the **Generate** button.

A status window then informs users they will receive an email with a secure URL from which to download the file, and the link to the secure URL itself.



**Figure 71 - Download Confirmation Window**

When the generated files are ready for download, users will receive the following email:

Your requested reports are now available for download. Please click the following link to access your secure files:  
<http://reportdownload.smarterbalanced.org/download/generated-filename>

This link will expire in 7 days.

This email was sent from a notification-only email address that cannot accept incoming email. Please do not reply to this message.

## Features

- Users select a state, academic year, and an assessment to generate the file.
- The file provides a list of districts and schools for a given state, with counts for the academic year. Data include overall counts and percentages for all demographic and program attributes used for disaggregation.

## PII Protection

- Access to the Download interface is restricted to authorized users with the proper system permissions. Requests may be made via the user interface or by a system-to-system API call.
- Once a request is made, the process is asynchronously executed and the output uploaded to the HTTPS Pickup Zone, where it can be retrieved only by the requesting user.
- After a certain number of days (configurable by state), the retrieval URL is disabled.

## Data Summary

The Assessment Completion Statistics download includes summary data for each school, district, and the state.

For a download summary for the 2016 Academic Year, the columns calculated based on Student Registration data are:

- State
- District
- School
- Category\*
- Value\*
- AY2015 Count of Registered Students
- AY2015 Count of Students Assessed by Summative Math
- AY2015 Percent of Registered Students Assessed by Summative Math
- AY2015 Count of Students Assessed by Summative ELA
- AY2015 Percent of Registered Students Assessed by Summative ELA
- AY2015 Count of Students Assessed by Interim Comprehensive Math
- AY2015 Percent of Registered Students Assessed by Interim Comprehensive Math
- AY2015 Count of Students Assessed by Interim Comprehensive ELA
- AY2015 Percent of Registered Students Assessed by Interim Comprehensive ELA

\* - Category and Value define disaggregates of interest, resulting in 28 rows per school, district, and state:

Category	Value
Total	Total
Sex	Male
Sex	Female
Ethnicity	HispanicOrLatinoEthnicity
Race	AmericanIndianOrAlaskaNative
Race	Asian
Race	BlackOrAfricanAmerican
Race	NativeHawaiianOrOtherPacificIslander
Race	White
Race	DemographicRaceTwoOrMoreRaces
Program	IDEAIndicator
Program	LEPStatus
Program	504Status
Program	EconomicDisadvantageStatus

Category	Value
Program	MigrantStatus
Grade KG	Total
Grade 01	Total
Grade 02	Total
Grade 03	Total
Grade 04	Total
Grade 05	Total
Grade 06	Total
Grade 07	Total
Grade 08	Total
Grade 09	Total
Grade 10	Total
Grade 11	Total
Grade 12	Total

Table 4 - Assessment Completion Statistics disaggregation

## Assumptions

During and shortly after the assessment administration, the Test Delivery System provides “intra-administration” completion reporting, but this reporting system’s completion report extract serves as an historical record.

### 1.1.11 State Download: Audit XML

#### Description

For a specified assessment administration, this download provides the original Assessment XML that flows from the Test Delivery System, to the Test Integrator component, through the Test Score Batcher component to the Data Warehouse. This download ensures that all information for a given student assessment is maintained, including usage reports for Universal Tools and Designated Supports, as well as any additional data provided by a Test Delivery System that is not otherwise processed by the Test Score Batcher.

#### Assessments

This download shows item response data for summative or interim comprehensive assessments.

#### Primary Audience

This download is primarily intended for auditing and research.

#### Navigation

Users who are authorized and have proper permissions can request this download through the Download interface by selecting **Audit XML**, an academic year, and clicking the **Generate** button.

The system then expands the window to request additional information. For the Audit XML, users must select a grade, subject and assessment type, as well as the academic year.

State Downloads ×

**Report / export type**

- Student Registration Statistics
- Assessment Completion Statistics
- Audit XML
- Individual Item Response Data

**Academic year**

2016 - 2017 ▼

**Grade (required)**

Select ▼

**Subject**

- Mathematics
- ELA / Literacy

**Assessment type**

- Summative
- Interim Comprehensive

**Generate**

Figure 72 - State Downloads Window

Once the **Generate** button has been clicked, a status window then informs users they will receive an email with a secure URL from which to download the file, and the link to the secure URL itself.

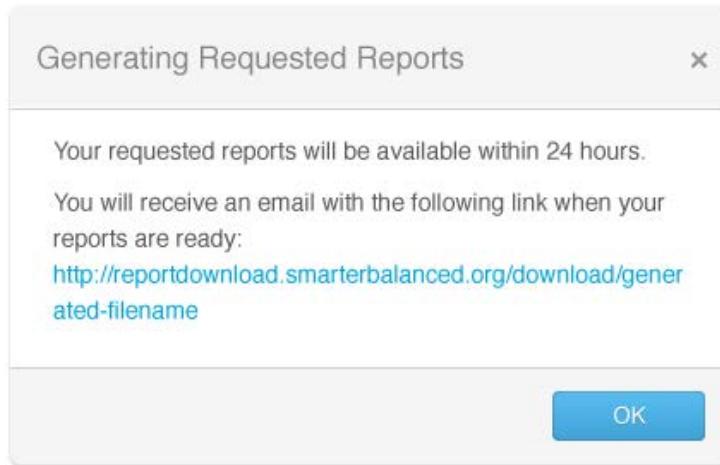


Figure 73 - Download Confirmation Window

When the generated files are ready for download, users will receive the following email:

Your requested reports are now available for download. Please click the following link to access your secure files:

<http://reportdownload.smarterbalanced.org/download/generated-filename>

This link will expire in 7 days.

This email was sent from a notification-only email address that cannot accept incoming email. Please do not reply to this message.

## Features

- Users select a specific assessment to generate the download of all XML for that assessment.

## PII Protection

- Access to the Download interface is restricted to authorized users with the proper system permissions. Requests may be made via the user interface or by a system-to-system API call.
- Once a request is made, the process is asynchronously executed and the output uploaded to the HTTPS Pickup Zone, where it can be retrieved only by the requesting user.
- After a certain number of days (configurable by state), the retrieval URL is disabled. By default, the number of days is 7.

## Data Summary

The Source or Audit XML data specification format is documented by the Test Delivery System vendor, and published to:

<http://www.smarterapp.org/documents/TestResultsTransmissionFormat.pdf>

The structure and contents of every assessment opportunity are maintained and reproduced in full by this download.

### 1.1.12 State Download: Individual Item Response Data

#### Description

For a specified assessment administration, this download provides Individual Item Responses to support Consortium psychometricians in performing psychometric analysis and calibration for the platform.

#### Assessments

This download shows item response data for summative or interim comprehensive assessments.

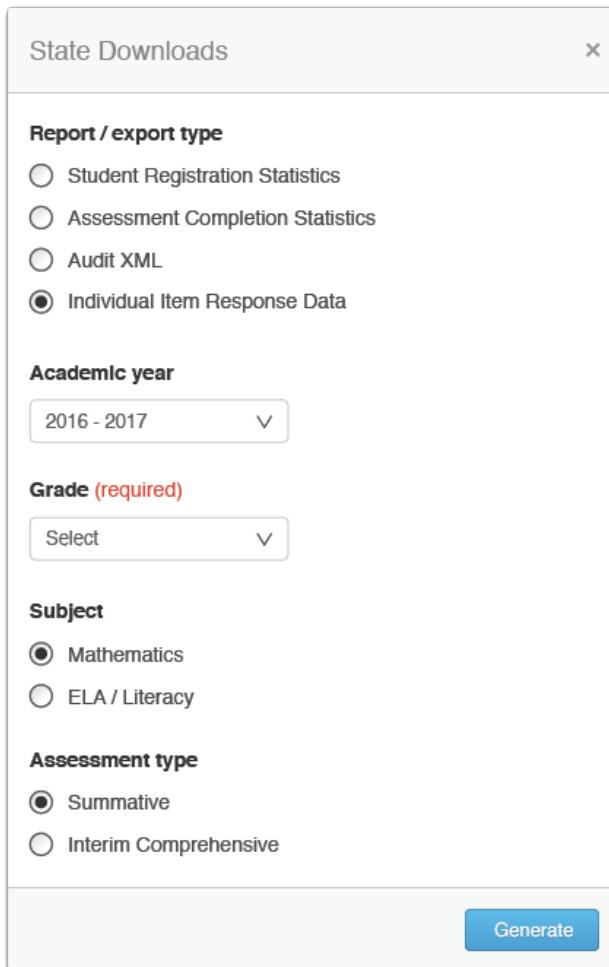
## Primary Audience

This download is primarily intended for Consortium administrators only, specifically the Consortium psychometrician.

## Navigation

Users who are authorized and have proper permissions can request this download through the Download interface by selecting **Individual Item Response Data**, an academic year, and clicking the **Generate** button.

The system then expands the window to request additional information. For the Individual Item Response Data, users must select a grade, subject and assessment type, as well as the academic year.



The screenshot shows a modal window titled "State Downloads". It contains several sections for configuration:

- Report / export type:** A group of radio buttons with "Individual Item Response Data" selected.
- Academic year:** A dropdown menu showing "2016 - 2017".
- Grade (required):** A dropdown menu showing "Select".
- Subject:** A group of radio buttons with "Mathematics" selected.
- Assessment type:** A group of radio buttons with "Summative" selected.
- Generate:** A blue button at the bottom right.

Figure 74 - State Downloads Window

Once the **Generate** button has been clicked, a status window then informs users they will receive an email with a secure URL from which to download the file, and the link to the secure URL itself.

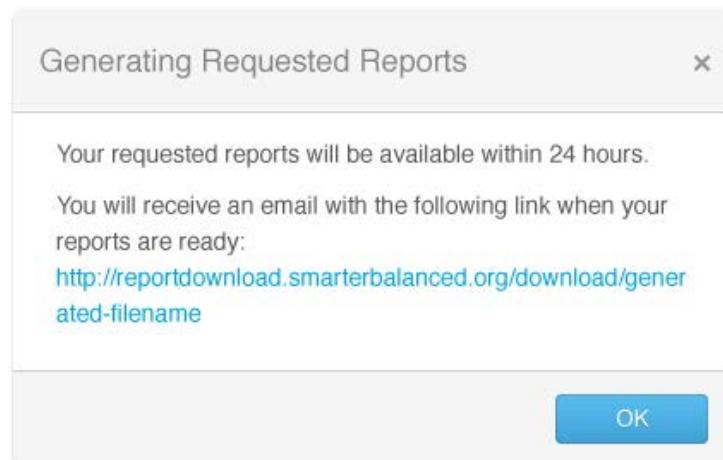


Figure 75 - Download Confirmation Window

When the generated files are ready for download, users will receive the following email:

Your requested reports are now available for download. Please click the following link to access your secure files:  
<http://reportdownload.smarterbalanced.org/download/generated-filename>

This link will expire in 7 days.

This email was sent from a notification-only email address that cannot accept incoming email. Please do not reply to this message.

## Features

- Users select a specific assessment to generate the download of all responses for that assessment.

## PII Protection

- Access to the Download interface is restricted to authorized users with the proper system permissions. Requests may be made via the user interface or by a system-to-system API call.
- Once a request is made, the process is asynchronously executed and the output uploaded to the HTTPS Pickup Zone, where it can be retrieved only by the requesting user.
- After 7 days the retrieval URL is disabled. The number of days is configurable by state or by the Consortium,

## Data Summary

The detailed data specification format for Individual Item Response Data is published to:

<http://www.smarterapp.org/documents/DataWarehouse-Spec-ItemLevel.pdf>

Name	Description	Width (chars)	Required	Acceptable Values	Data Type	References
Key	Identifier for an individual item, as set by the Item Authoring system	40	Y	40 alphanumeric characters allowed, expected to be GUID	xsd:token	<a href="https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=3623">https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=3623</a>  CEDS Element ID 000630
studentID	Identifier for the student (repeated in each row, but will not change within a single file)	50	Y	50 alphanumeric characters allowed	xsd:token	<a href="https://ceds.ed.gov/CEDSElementDetails.aspx?TermxTopicId=20775">https://ceds.ed.gov/CEDSElementDetails.aspx?TermxTopicId=20775</a>  CEDS Element ID 001071
segmentId	Test segment the item was administered on	250	Y	250 alphanumeric characters allowed	xsd:token	
Position	Ordinal position of the item on the test		N	Positive 32-bit integer, null allowed	xsd:unsignedInt	
clientId	Identifier for an individual item, as set by the client	80	Y	80 alphanumeric characters allowed	xsd:token	
Operational	1 if test item is operational, 0 if test item is field test	1	Y	0, 1	xsd:boolean	
isSelected	1 if the student submitted their response for scoring, 0 if they did not	1	Y	0, 1	xsd:boolean	
format	Type for the given item	250	Y	associateInteraction choiceInteraction customInteraction drawingInteraction endAttemptInteraction extendedTextInteraction gapMatchInteraction graphicAssociateInteraction graphicGapMatchInteraction graphicOrderInteraction hotspotInteraction hotTextInteraction inlineChoiceInteraction matchInteraction mediaInteraction orderInteraction positionObjectInteraction selectPointInteraction sliderInteraction textEntryInteraction uploadInteraction EBSR EQ ER GI HT HTQ MC MI MS	xsd:token	<a href="https://ceds.ed.gov/CEDSElementDetails.aspx?TermxTopicId=21603">https://ceds.ed.gov/CEDSElementDetails.aspx?TermxTopicId=21603</a>  CEDS Element ID 001158

Name	Description	Width (chars)	Required	Acceptable Values	Data Type	References
				NL SA TI TUT WER WORDLIST Stimulus		
Score	Number of score points earned by the student, or -1 if the item is not scored		Y	Unsigned float, -1 allowed	xsd:float	
scoreStatus	Provided by independent item scoring engine		Y	NOTSCORED SCORED SCORINGERROR WAITINGFORMACHINESCORE	xsd:token	
adminDate	Date and time item was administered to student		Y	Date + Time	xsd:datetime	<a href="https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=3960">https://ceds.ed.gov/ CEDSElementDetails.aspx?TermId=3960</a>  CEDS Element ID 000959
numberVisits	Number of times the student modified their response to the item		Y	Positive 32-bit integer	xsd:unsignedInt	
Strand	Top level strand in the strand hierarchy the item is on	150	Y	150 alphanumeric characters allowed	xsd:token	
contentLevel	Lowest level strand in the strand hierarchy the item is part of	150	Y	150 alphanumeric characters allowed	xsd:token	
pageNumber	Number of the (online) page the item appears on		Y	Positive 32-bit integer	xsd:unsignedInt	
pageVisits	Number of times the student visited the (online) page this item is on		Y	Positive 32-bit integer	xsd:unsignedInt	
pageTime	Time (in milliseconds) the student spent on the (online) page this item is on		Y	Signed 32-bit integer	xsd:int	
Dropped	1 if the item is active, 0 if the item has been inactivated ("dropped")	1	Y	0, 1	xsd:boolean	

**Table 5 - Individual Item Response Data Summary**

## Assumptions

- 1) The item response data provided by the Test Delivery System is complete and sufficient for the purposes of external analysis.

- 2) All responses are de-identified, but joinable to other data sources through the internal test, item, and student identifiers.

## Reporting Features Summary

Feature	Description	Individual STUDENT Report	List of Students by Assessment GRADE	Results by Grade for a SCHOOL	Comparing Schools in a DISTRICT	Comparing Districts in a STATE
Alignment	For all users, the ability to align aggregate score reports by endpoints or by the cut between levels 2 and 3			✓	✓	✓
Assessment Accommodations	Display of Accommodations for which a student was eligible.	✓				
Claim Level Reporting	For all users, reporting on mathematics and/or ELA/literacy subscores for summative/ICA	✓	✓			
Context Security	For all users, access to features and PII is enforced via the Smarter Balanced Single Sign-on and Permissions components	✓	✓	✓	✓	✓
Download: Current View as CSV	For all users, download the current view of summary data (including any active filters, sorting, or selection) in a nonvisual tabular CSV format		✓	✓	✓	✓
Download: Student Assessment Results	For users with permissions to use this feature, a request to download the student assessment results (including test, student, and scoring data)		✓	✓	✓	✓
Filtering	For all users, the ability to disaggregate results by student attributes		✓	✓	✓	✓
Find a...	For all users, the ability to search for a specific character string (e.g., name or partial) within the current report		✓		✓	✓

Feature	Description	Individual STUDENT Report	List of Students by Assessment GRADE	Results by Grade for a SCHOOL	Comparing Schools in a DISTRICT	Comparing Districts in a STATE
Interim Comprehensive Reporting	For users with permissions to view PII, reporting on overall mathematics and/or ELA/literacy scores for the Interim Comprehensive Assessment (ICA)	✓	✓			
Legend	For all users, summaries and description of visual design elements in a given report	✓	✓	✓	✓	✓
Navigation	Login/logout User name display Language selection Breadcrumb/hierarchy navigation User guide Frequently asked questions (FAQ) Glossary Resources - links to keyword-driven content searches for relevant materials in the digital library Legend - opens popup with legend text	✓	✓	✓	✓	✓
Optional Student Grouping	For users with permissions to view PII, states may opt to provide student groupings for use in filtering the List of Students by Assessment GRADE report		✓			
Printing: Batch PDF	For users with permissions to access this feature, a batch PDF file for multiple student ISRs can be requested for download.  The download is split automatically by grade. So a user who requests a download of all the students from a middle school receives three PDF files, one for each grade.		✓	✓		

Feature	Description	Individual STUDENT Report	List of Students by Assessment GRADE	Results by Grade for a SCHOOL	Comparing Schools in a DISTRICT	Comparing Districts in a STATE
Printing: Individual PDF	For users viewing the Individual STUDENT Report, a specially-prepared print option that exposes and arranges all supporting report content	✓				
PII Protection	Protecting student anonymity in small groups or any group where all students are below proficiency  Protecting specific individual information from unauthorized access	✓	✓	✓	✓	✓
Reference Row	Aggregate reports include an overall aggregation row for reference, which provides percentages and counts of students by achievement level for all entries in a list of aggregates.			✓	✓	✓
Report Information	Summary description of purpose, uses, and features of a given report	✓	✓	✓	✓	✓
Select-to-Compare	Flexible selection for ad-hoc comparison of list elements		✓		✓	✓
Sorting	Reordering list elements by any column		✓	✓	✓	✓
State Download: Assessment Completion Statistics	For users with permissions to use this feature, a request to download statewide data is available to provide historical assessment completion statistics for a given academic year.		✓	✓	✓	✓

Feature	Description	Individual STUDENT Report	List of Students by Assessment GRADE	Results by Grade for a SCHOOL	Comparing Schools in a DISTRICT	Comparing Districts in a STATE
State Download: Audit XML	For users with permissions to this feature, a request to download statewide full original XML from the Test Delivery System for any given assessment administration		✓	✓	✓	✓
State Download: Individual Item Response Data	For users with permissions to use this feature, a request to download de-identified statewide response data for any given assessment administration		✓	✓	✓	✓
State Download: Student Registration Statistics	For users with permissions to use this feature, a request to download statewide data is available to provide registration statistics between two consecutive academic years.		✓	✓	✓	✓
Summative Reporting	Reporting on overall mathematics and/or ELA/literacy scores for summative assessments	✓	✓	✓	✓	✓

**Table 6 - Reporting Features Summary**

## Inference Guidance Content Summary

The Reporting System includes a variety of textual content provided for context, explanation, and reference.

Content Name	Report	Content Text	Source	Next Step
Achievement Level Descriptor, or, ALD	ISR	Level 2: The student has nearly met the achievement standard and may require further development.	Consortium Leadership	Standards Setting
College Content-Readiness Resources	ISR	Students in Grades 8 through 12 see Consortium-common Higher Ed policy information, and a state-customizable link to state resources: <a href="http://stateresources.link">http://stateresources.link</a>	UCLA Collaboration Conference 2013.09.10-12	State Configurable
Legend - Claim Levels	ISR	[see Claim Reporting]	RFP-15 Work Group	Confirmation with Score Integrator
Practical Implications	ISR	The scale, units, and cut-scores are illustrative and are expected to change. Score summaries will be revised in the summer of 2014, and tailored by grade and subject in terms of the knowledge, skills, and processes that a student has demonstrated he or she can master.	RFP-15 Work Group	Standards Setting
Claim Description - Reading	ISR	Students can read closely and analytically to comprehend a range of increasingly complex literary and informational texts.	<a href="#">ALD Publication</a>	Standards Setting
Claim Description – Writing	ISR	Students can produce effective and well-grounded writing for a range of purposes and audiences.	<a href="#">ALD Publication</a>	Standards Setting
Claim Description – Listening	ISR	Students can employ effective speaking and listening skills for a range of purposes and audiences.	<a href="#">ALD Publication</a>	Standards Setting
Claim Description - Research and Inquiry	ISR	Students can engage in research and inquiry to investigate topics and to analyze, integrate, and present information.	<a href="#">ALD Publication</a>	Standards Setting
Claim Description - Concepts and Procedures	ISR	Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.	<a href="#">ALD Publication</a>	Standards Setting

Content Name	Report	Content Text	Source	Next Step
Claim Description - Problem Solving and Data Modeling and Analysis	ISR	<p>Students can solve a range of complex, well-posed problems in pure and applied mathematics, making productive use of knowledge and problem-solving strategies.</p> <p>Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.</p>	<a href="#">ALD Publication</a>	Standards Setting
Claim Description - Communicating Reasoning	ISR	Students can clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.	<a href="#">ALD Publication</a>	Standards Setting
Report Information	All	[see Report details, differs for each report]	RFP-15 Work Group	User Testing
Legend	All	[see Report details, differs for each report]	RFP-15 Work Group	User Testing
FAQ	All	[See section 2.4.1]	User Testing	User Testing
Glossary	All	[see section 2.4.2]	User Testing	User Testing
Resources	All	[see Navigation for details]	Digital Library Modules	User Testing

Table 7 - Inference Guidance Content Summary

### 1.1.13 Frequently Asked Questions (FAQ)

#### General

##### **Who can access the Smarter Balanced Reports?**

The password-protected reporting system provides information to state and district leaders, principals, teachers, parents, guardians and students.

Access to information will vary based on users' educational roles and associated system permissions.

The Consortium will make Consortium-level results available to the general public via a different system.

##### **What types of reports are available?**

There are three types of reports:

- Aggregate, or rolled up, reports present a view of student performance on the most recent summative assessment for the state, district, school or grade. These reports show comparisons between districts in

a state, schools in a district, or grades in a school. These reports are available to all authorized educators to see their state, district and school information.

- The List of Students report displays overall scores and claim-level information for a group of students in a school. This report is only available to educators with access to personally identifiable information for the group of students in the report. This report provides information for summative and interim assessments.
- The Individual Student Report presents overall scores and claim-level information for an individual student. Educators with access to personally identifiable information for a student are able to view this report and share it with parents and students via print out or email. This report provides information for summative and interim assessments.

### How does Smarter Balanced protect students' privacy?

Smarter Balanced has taken a number of steps to ensure that all student data is stored securely and protected.

- Data Separation – all data sent from a state to the Smarter Balanced Data Warehouse will be stored in its own set of data stores to ensure that users from one state are not permitted to view another state's data.
- Single Sign On (SSO) – Users will log into the reporting system through the Smarter Balanced SSO, which will control user access centrally and provide users with access as directed by their states.
- User access control - States control the level of access that they grant their users and the Data Warehouse enforces those rules. This allows each state to set its own policies around the protection of Personally Identifiable Information (PII) and to protect against unauthorized access to student data.

States will define which districts and schools a user is entitled to see as well as whether they can see any student information. If they are entitled to see student information, the user access policies dictate which student data they are allowed to view.

States control data for students in their state, not the Consortium, and states are the only entity that can grant access to data. The Consortium is simply the custodian of stored data.

- Encryption – All data stored in the Data Warehouse is encrypted to protect it against external threats.

### How is data generated for these reports?

Student assessment scores will be calculated using scoring protocols commonly used by all states and will include computer-scored items and hand-scored items. Student scores will be passed to the Smarter Balanced data warehouse on a schedule defined by each state. Once the scored data is passed over, the reports will be available.

## For Educators

### Who has access to school level data?

States and districts provision user accounts for educators and administrators. All authorized users can login and review aggregate data across their registering state, at the district, school and grade level. Only users with specific permissions, as managed by the states and districts, can access Personally Identifiable Information (PII) for students.

**How can I get access to the Reporting system to see my students' scores?**

States and districts provide educators with user logins and passwords for the Smarter Balanced Assessment System. Educators can login to the reporting system through the Smarter Balanced portal or through the reporting system landing page.

**Where can I find resources to help me understand how to use the reporting system?**

The Smarter Balanced Digital Library houses Score Reporting Modules to help users understand how to use the Smarter Balanced Reporting System. Modules provide an overview of navigation features that enable users to access data, including Summative and Interim Comprehensive Assessment data. Instructional videos, interactive learning activities, and relevant real-life scenarios explain how to identify the purpose of, locate, and use the Smarter Balanced Reporting System's navigation features.

Links to these modules may be found in the Resources tab of the Help popup.

**What will the reports tell me about my school's or district's performance?**

The reporting system presents aggregate, or rolled up, reports that display a view of student performance on the most recent summative assessment for the state, district, or school. The reports display multi-colored bars that represent the different achievement levels. The percentages of students and total number of students within each state, district or school performing at each level appear as numbers in the bars.

**What comparisons will the reporting system support?**

The aggregate reports provide educators with a way to compare district aggregates to each other or to the state aggregate or to compare school aggregates to each other or to the district.

**How do I navigate between academic years?**

There is an Academic Year Selector available on the upper right-hand corner, under the report title (e.g., "Districts in Example State"). The academic years available for selection are derived from the assessment results that are loaded into the Data Warehouse.

**How do I navigate between test types?**

Aggregate reports only include Summative assessment data. At the grade-level and below, reports that display individual student data also have an Assessment Selector. This feature provides the ability to select between Summative and Interim assessment results for the chosen report.

**After completing testing, when will reports be available?**

The time between when a given student completes an assessment and when that student's assessment record is included in reports will depend on a number of factors, chiefly the time it takes to score all the items on the tests.

The Data Warehouse accepts individual scored records from the Test Administration System, and processes uploaded records once a day. Once loaded, the data is available for reporting immediately. Estimated performance profiles for each step in the process are documented on

<http://www.SmarterApp.org>.

**For Parents**

**Who has access to my child's achievement data?**

Smarter Balanced provides your state, district, and schools with the tools to manage user permissions for educators consistent with relevant federal, state, and local laws and regulations governing student privacy.

Your child's educators will have access to individual student reports for their students. Educators can also print out the report or download a PDF version of the report for sharing with parents or guardians.

**What will the reports tell me about my child's performance?**

Your child's report will provide you with information to help you understand their progress toward mastery of the Common Core State Standards and attainment of the academic knowledge and skills required to be college content- and career-ready.

It will report your child's scores in both mathematics and English language arts / literacy on their summative (end of year) and interim assessments. The scores are presented as an overall score in each subject on a scale; an achievement level of 1 to 4; and sub-scores within each subject. The report will also show your child's scores on any interim block assessments given to them over the course of the year.

If your child has not attempted all the questions on the test, it will be indicated on the report. For Summative tests, an invalid test attempt will be indicated.

However on the Interim reports, a valid and a standardized test attempt by the student will be indicated on the report.

Explanatory text on the report will describe what the achievement levels mean and how to interpret the report.

**How can I support my child based on his or her scores?**

These reports are designed to provide parents and educators with a common understanding of student progress and achievement. Discuss your child's report with their teachers and work together to develop appropriate supports for your child.

Read more about Smarter Balanced and the new assessments at [smarterbalanced.org](http://smarterbalanced.org) or click on the [Help](#) link for more information.

#### **1.1.14 Reporting Glossary**

**Table 8 - Online Reporting Glossary**

Term	Definition
504 plan	The 504 Plan is a plan developed to ensure that a child who has a disability identified under Section 504 of the Americans with Disabilities Act and is attending an elementary or secondary educational institution receives accommodations that will ensure their academic success and access to the learning environment.

Term	Definition
Achievement Level Descriptors (ALDs)	Statements that document the knowledge, skills, and abilities represented at different levels of performance on the Smarter Balanced assessments. They describe degree of mastery of the Common Core State Standards
Breadcrumb Navigation Trail	List of report titles that appear at the top of the reporting system screen as users navigate through reports. Users can navigate back to a report by clicking on a title
Claim Level	<p>Claim performance is reported through the use of a set of three performance levels:</p> <ul style="list-style-type: none"> <li>- "Below Standard" - as represented by a yellow triangle with an exclamation point;</li> <li>- "At/Near Standard" - as represented by a grey circle with a horizontal line; and</li> <li>- "Above Standard" - as represented by a blue circle with a checkmark.</li> </ul>
College Content Ready	Students who perform at the College Content-Ready level demonstrate foundational knowledge and skills necessary for introductory college courses in a variety of disciplines. They also demonstrate subject-area knowledge and skills associated with readiness for entry-level, transferable, credit-bearing courses.
Completeness	This indicates the completeness of a student test attempt. If a student attempts all the questions on a test, his /her score is complete, otherwise, the score is partial.
Comma Separated Values (CSV)	A standard flat file format used by high volume systems for rapid processing, where each line of text is a row, and columns are separated by the comma character
Computer Adaptive Test (CAT)	Using specially designed computer software, items are selected for the student based on student responses throughout the test. By adapting to the student as the assessment is taking place, these assessments present an individually tailored set of items to each student and provide more accurate scores for all students across the full range of the achievement continuum.
Criterion-referenced	Criterion-referenced assessments report student performance against a fixed set of predetermined criteria or learning standards. In elementary and secondary education, criterion-referenced reports are used to evaluate whether students have

Term	Definition
	learned a specific body of knowledge and/or acquired specific skills.
Download	A navigation feature that allows users to download report data for viewing in different applications (e.g., Microsoft Excel) or for downloading batches of student reports in PDF format for printing.
Economic Disadvantage	A locally-defined field that indicates that the student met the State criteria for classification as having an economic disadvantage
Error band	Smarter Balanced tests provide the most precise scores possible within a reasonable time limit, but no test can be 100 percent accurate. The error band indicates the range of scores that a student would likely achieve if they were to take the test multiple times. It is similar to the "margin of error" that newspapers report for public opinion surveys.
Filter	A navigation feature that allows users to focus on a specific population or populations including: grade level, limited English proficiency, race/ethnicity, gender, IEP, 504, economic disadvantage, migrant status or state-defined student group (optional).
Help Section	Access to supporting resources, including: a frequently asked questions (FAQ) section, glossary, and links to additional resources.
Interim	Interim assessments are designed to support teaching and learning throughout the year by providing meaningful information to gauge student progress toward mastery of the skills measured by the summative assessments through assessments of the Common Core State Standards that can be used at strategic points during the school year.
Legend	Report feature that provides explanations of achievement level descriptors (ALDs), population bars, and details of the score

Term	Definition
	reports.
Mouse Over (Hover Over)	A navigation feature in which users position the cursor over a report element to view a popup window (e.g., holding the cursor over the multi-colored population bars will cause the percentage and number of students performing at each achievement level to appear in a new window).
Personally Identifiable Information (PII)	<p>Personally Identifiable Information. Refers to student information that is subject to confidentiality requirements under applicable state and federal laws and regulations.</p> <p>The regulations define “personally identifiable information” so that it includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>a. The student’s name</li> <li>b. The name of the student’s parent or other family member;</li> <li>c. The address of the student or student’s family;</li> <li>d. A personal identifier, such as the student’s social security number or student number;</li> <li>e. A list of personal characteristics that would make the student’s identity easily traceable; or</li> <li>f. Other information that would make the student’s identity easily traceable. (34 CFR § 99.3)</li> </ul>
Print	A navigation feature that allows users to print individual student reports in color or grayscale and in English, Spanish or Vietnamese
Report Information	An icon that appears next to the report name of each type of report and describes the purpose, features, and uses of that report
Select	A navigation feature to help users focus on certain data points by showing only the data for specific districts, schools, or students selected by the user.
Smarter Balanced Summative Assessment	The Smarter Balanced assessment is available in English language arts/literacy and mathematics to students in grades 3-8 and 11. Each content area of the online test consists of Computer Adaptive items (CAT) as well as performance task (PT).
Smarter Balanced Interim Assessment Block (IAB)	Interim Assessment Blocks focus on smaller sets of related concepts and provide more detailed information for instructional purposes. There are between five and seventeen blocks per

Term	Definition
	subject per grade.
Smarter Balanced Interim Comprehensive Assessment (ICA)	Interim Comprehensive Assessments use the same design as the summative assessments, assess the same range of standards, and provide scores on the same scale.
Sort	A navigation feature that enables users to view names alphabetically, and view population or achievement from least to most or most to least.
Student attributes	Student attributes include: grade level, limited English proficiency status, race/ethnicity, gender, IEP status, 504 status, economic disadvantage status, migrant status or state-defined student group (if provided).
Sub-group	Any group of individual students defined by a user through filters or manual selection
Validity	Validity indicates the conditions under which the test was administered to a student. A summative assessment can be deemed Valid or Invalid test, based on appropriateness of the conditions. An invalid summative assessment is indicated on the student report. An interim assessment can be deemed Standardized or Non-standardized, based on the test attempt. A standardized interim assessment is indicated on the student report.

## Definition of Terms

### 1.1.15 Accessibility

Amplify committed to creating a solution that provides maximum equity of access to all reported data in compliance with Section 508. While the unique presentation of this data may not have an equivalent for certain differently abled users, the information itself is accessible and Amplify has worked with the Consortium Accessibility and Accommodations group to determine the most equitable solution for all appropriate reporting.

- Nonvisual representation - All aggregation reports are available for download in a non-graphical, tabular format.
- Screen readers and keyboard navigation - All reports are usable via screen reader and accessible to keyboard navigation, using standard solutions for accessibility (e.g., tab-stop ordering and “semantic” alt-text for images).
- Text-to-speech, braille, screen-reading software - Reports will follow guidelines for content to be used by screen-reader and support refreshable braille, text-to-speech tags, and text magnifying software. Braille

support must include contracted, uncontracted, and Nemeth Braille. In general, text-to-speech and braille are handled by client-side solutions, although Amplify has included design and code elements (e.g., tab-stops and “semantic” alt-text) that support a user experience that is 508-compliant. The target operating systems and browsers have many options for supporting Text-to-Speech and Braille. The American Foundation for the Blind provides guidance on supporting screen-reading software and braille-related extensions here: <http://www.afb.org/prodbrowsecatresults.asp?catid=49>.

- Magnification/Zoom - All supported browsers provide native zoom scaling from 25% to 500%. There are also several freely-available extensions or plugins for each browser to increase text size or enlarge images.
- Highlighter - Supported browsers provide native select-to-highlight which can be configured with an array of color choices and behaviors to support contrast needs. Each browser also supports several freely available extensions or plugins that provide more advanced client-side highlighting capabilities.
- Color/Contrast - Supported browsers provide native contrast controls, but freely available extensions or plugins can provide additional support for displaying content in a number of alternative contrast schemes. All color choices (including hue, saturation, and contrast) have been verified as meeting visual acuity standards.

### 1.1.16 Accommodations

The Smarter Balanced Accessibility and Accommodations Work Group worked directly with Amplify to define how the Data Warehouse and Reporting System store and report accommodations data for students.

In the Smarter Balanced [Usability, Accessibility, and Accommodations Guidelines](#), accessibility features are identified across three categories, Universal Tools, Designated Supports, and Accommodations. If a student is given one or more Accommodation(s) on a test, then this information is captured in the Data Warehouse and displayed on the Individual STUDENT Report (ISR). Information on Universal Tools and Designated Supports are not included in the ISR. Accommodation information is not aggregated or reported on above the ISR level, where the accommodations that are made available to the student on a test are displayed as follows:

**Accommodations**

The following accommodations were made available:

**Alternative Response**   **American Sign Language**   **Closed Captioning**   **Scribe**  
**Streamline Mode**

**Figure 76 - Accommodations Display**

Additional information on Universal Tools and Designated Supports is included in the Audit XML for future use, but is not reported on in the current version of the Reporting System.

### 1.1.17 Achievement Levels and Proficiency

Achievement Levels and their cut scores are defined and described by the Consortium.

A student is considered proficient if test results place his or her score in Level 3 or 4, and therefore the Level 3 cut-score is somewhat analogous to a proficiency line. This distinction is what drives the Alignment behavior in the aggregate reports.

### 1.1.18 Authorization

Authorization refers to external, policy-driven authorization, contrasted with permissions, which are what the system uses to enforce and/or allow access to student personally identifiable information (PII). Any access to PII requires appropriate credentials as determined by the Smarter Balanced Single Sign-On component and the Smarter Balanced Permissions component.

## 1.1.19 Claims Reporting

Smarter Balanced has identified the following “Claims” that support the Overall subject (also known as “Composite”) scores:

Subject	Mathematics	ELA/Literacy
<b>Claims List</b>	<ul style="list-style-type: none"> <li>Concepts and Procedures</li> <li>Problem Solving and Modeling and Data Analysis</li> <li>Communicating Reasoning</li> </ul>	<ul style="list-style-type: none"> <li>Reading</li> <li>Writing</li> <li>Listening</li> <li>Research and Inquiry</li> </ul>

**Table 9 - Claims List**

Reporting provides Claim-level insights for individual students, and for the List of Students by Assessment GRADE report, but Claim-level aggregations are not supported.

## Claim Calculation Details and Levels Determination

- There is a single score per claim, which derives from the same scale as the Overall “Composite” score
- The width of “Category 2” for each claim is based on the same amount of Standard Error of Measure (SEM). As such, the actual widths for the Category 2 scores across different claims vary as the SEMs of the claims vary
- Any claim score lower than the bottom end of the error band around the Composite Level 2/Level 3 cut score (a.k.a. the “proficiency line”) is considered a “Category 1” claim score
- Any claim score within the error bands is considered a “Category 2” claim score
- Any claim score above the upper end of the error band around the Composite Level 2/Level 3 cut score is considered a “Category 3” claim score.

## Overall Scale Score and Achievement Levels

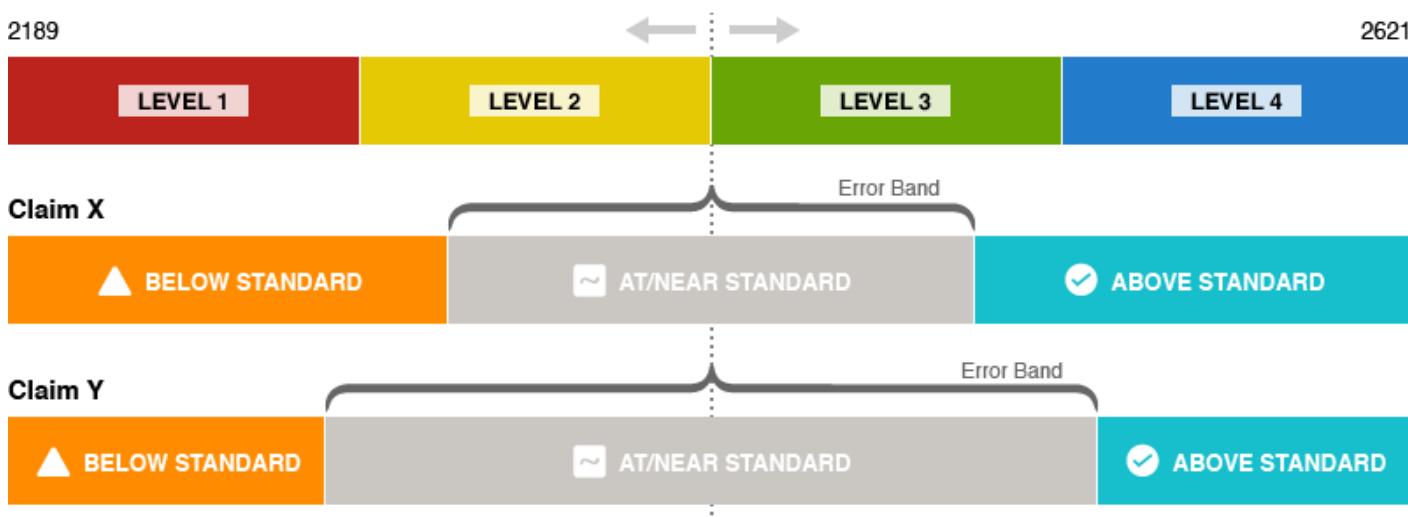


Figure 77 - Claims Score Illustration

In Category 3, there is confidence that the student is on track (i.e., the student should continue receiving current levels of support at this point in time). In Category 1, there is confidence that the student is not on track (i.e., the student is clearly in need of help, support, or assistance; the student is clearly not demonstrating the expected knowledge or ability to apply skill). In Category 2, the student is not clearly in either category and their status cannot be determined with an appropriate level of confidence.

## Claim Levels and Icons

The following labels for the List of Students by Assessment GRADE and Individual STUDENT Reports have been presented to all governing state leads for feedback and have been approved by Smarter Balanced:

 **Above Standard**

The assessment results indicate that the student understands and can apply their knowledge to the standards in this subject area for their grade.

 **At/Near Standard**

The assessment results may be just above or just below the standard, but due to the error band (see above), it is impossible to determine with a sufficient degree of confidence.

 **Below Standard**

The assessment results indicate that the student has not yet met the standard in this subject-area for their grade.

Claim scale scores are not exposed via any “Current View” download, but are included in the Student Assessment Result download.

## Assumptions

- 1) For the Individual STUDENT Report and List of Students by Assessment GRADE reports, the Reporting System displays claim levels as visual icons with labels and descriptors, but does not expose the actual numerical claim score data.

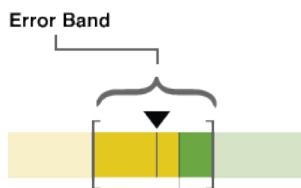
- 2) Every assessment result provided to the Data Warehouse includes a student's scale score, level determination, scale maximum, scale minimum, scale units, and error band.
  - o Claim scale scores are measured on the same scale as the Overall score.
  - o Claim error bands vary by Claim.
- 3) Smarter Balanced provides the algorithm for calculating the claim score groupings per grade, subject and claim to the Score Integration vendor; neither the Data Warehouse nor the Reporting System dynamically calculates scale scores, error bands, or level determinations.
- 4) Student level claim data are not aggregated in the reporting system in the Comparing Districts in a STATE, Comparing Schools in a DISTRICT or Results by Grade for a SCHOOL reports.

### **1.1.20 Context Security, Access Patterns, and Single Sign-On (SSO)**

- Registered users can see:
  - all non-PII-protected data for their state
  - any PII-protected data that they are authorized to view, as managed in permissions at the level of school (e.g., a teacher in school X with PII access can see all students in school X)
- All users must have login credentials for the SSO component and must log in to view reports. There is no anonymous public user support (unregistered users, logged-out users).
- All Single Sign-On functionality is managed by the SSO shared service. The Data Warehouse and Reporting System receive user authorizations from the SSO shared service. Neither the Data Warehouse nor the Reporting System maintain or verify user authorizations.
- The Consortium SSO shared service or state-deployed SSO solution provide the interface for management of associations between users and student PII.
- Access to Reports and PII are managed by states, districts, or potentially even schools via the Smarter Balanced Shared Services.
- Provisioning and management of Consortium user accounts are supported by the Consortium via the Smarter Balanced Shared Services.
- Educators may have access to student PII for their associated entities (school(s)/district(s)), which can be controlled within the SSO shared service at the school level.
- Noneducators have no access to student information; the Consortium does not support parent or student login in the Consortium Data Warehouse and Reporting instance.
- Permissions are available on a per-feature basis, and the Permissions component allows for each permission to be applied to one or more nodes in the hierarchy (e.g., Student PII Access for School X, Student PII Access for District Y).
  - Assessment Completion Extract
  - Audit XML Extract
  - Individual Item Response Data Extract
  - Student Assessment Results Extract
  - Student personally identifiable information (also known as “PII Access”)
  - Student Registration Statistics Extract

### **1.1.21 Error Bands and SEM**

- Standard Error of Measurement (SEM) is accounted for in the reports by the error bands that are displayed in the Individual STUDENT Report and the List of Students by Assessment GRADE report for overall scores. SEMs are also included on claim scores in the Student Assessment Results downloads.



Smarter Balanced tests provide the most precise scores possible within a reasonable time limit, but no test can be 100 percent accurate. The **error band** indicates the range of scores that a student would likely achieve if they were to take the test multiple times. It is similar to the "margin of error" that newspapers report for public opinion surveys.

**Figure 78 - Error Band Illustration**

- Error band meaning is explained in the Legend of each report that displays them:

Smarter Balanced tests provide the most precise scores possible within a reasonable time limit, but no test can be 100 percent accurate. The error band indicates the range of scores that a student would be very likely to achieve if they were to take the test multiple times. It is similar to the "margin of error" that newspapers report for public opinion surveys.

## 1.1.22 Integration with Institutes of Higher Education (IHE)

- There is no separate user report for IHE, but there is specific IHE language to explain the 11<sup>th</sup> grade Individual STUDENT Report, which is configurable on a per-tenant basis:

Students in Grades 8 through 12 see Consortium-common higher education policy information, and a state-customizable link to state resources:

<http://stateresources.link>

- Eleventh grade Individual STUDENT Reports support IHE on a single student basis
- States can extract 11<sup>th</sup> grade assessment results via bulk assessment outcome extracts and provide it to IHE. There is no interface for IHE personnel to extract 11<sup>th</sup> grade assessment results on their own.

## 1.1.23 Interim Assessment Blocks (IAB) Reporting

Reporting for Interim Assessment Blocks are described in Section 2.1.1.1 and 2.1.2.1 of this document.

## 1.1.24 Interim Comprehensive Assessments (ICA) Reporting

ICAs are similarly designed to summative assessments, but are not equivalent.

From a Data Warehouse perspective, assessment outcomes and individual item responses appear identical between the two, except for the "assessment type" field. Assessment records also have a specific Academic Year (e.g., 2015 for the 2014-15 Academic Year) and Assessment Date (first date of the administration window). The Assessment Date is displayed on the assessment selector.

From a reporting perspective, ICA results are reported through the Individual STUDENT Reports (with overall and claim scale scores for each subject) and in aggregate form on the List of Students by Assessment GRADE report.

From a policy perspective, an ICA is intended for use as a benchmarking tool, where administration requirements are less stringent than for the summative assessment. Consequently, summative results support higher-level aggregation (between grades, schools or districts) because the test conditions and administration requirements are comparable. ICAs, which may be administered with greater variations in test conditions, would introduce validity issues if aggregated and are therefore only reported on a per student basis.

The additional capability to aggregate ICA results—e.g., by way of assessment and/or date filtering—is documented as a future enhancement to the system.

## Assumptions

- 1) On the List of Students by Assessment GRADE report and Individual STUDENT Report, educators see a dropdown list of all assessments taken by that student or group of students.
- 2) Assessments are listed as "YYYY.MM.DD - Grade X - Type - Subject" (e.g., 2017.05.15 - Grade 4 - Summative - Mathematics).
- 3) Assessment retakes are sent in with the same name and date and replace the original assessment in reports; previous results are not deleted (available by extract), but they are not aggregated or reported on.
- 4) The list is not filtered and displays all assessments that have been loaded into the Data Warehouse. Restricting the list may be a future enhancement.
- 5) On the List of Students by Assessment GRADE report, any assessment given to at least one of the students appears on the list. Students with no results for that assessment do not appear when that assessment is selected.
- 6) All reports for interim comprehensive assessments may be identical to the reports created for summative assessments as long as the appropriate qualifications are communicated. The following qualifications were endorsed by Consortium Leadership on 2014.07.16, and are accessed on the List of Students by Assessment GRADE and Individual STUDENT Report by pausing on or clicking the blue information icon .

### Important Information About Interim Assessments

- Interim assessments may be scored by local teachers. This scoring is not subject to the rigorous controls used in summative assessment and local results may show some variations.
  - Interim assessment questions are not secure. Exposure to and familiarity with test questions may affect student performance and the accuracy of interim results.
- 7) There is no reporting for interim comprehensive assessments above the level of the List of Students by Assessment GRADE for a grade in an individual school (no grade, school, or district comparison reports). (endorsed by Consortium Leadership on 2013.09.11)
  - 8) All interim comprehensive assessment language/content for Qualifications or Descriptions have been provided by either the Test Design and Validation Work Group, Lead Psychometrician, or the 05-Interim Assessment Work Group, subject to any specifications from the Reporting vendor.

### **1.1.25 Help**

General help information and links to several sets of resources:

- Frequently asked questions
- Glossary
- Resources (links to keyword-driven search of the Digital Library)
- User Guide (created by Amplify with input from User Experience Study)

### **1.1.26 HTTPS Pickup Zone**

For download requests that are either 1) too large for direct download via the browser or 2) complex enough to require significant processing time, the download is made available via an HTTPS Pickup Zone.

Once the files have been generated and are available for pickup, the user can retrieve the file(s) from the URL provided to them. The download is only retrievable from the provided URL by the original requesting user.

The Pickup Zone relies on the authentication of the Smarter Balanced Single Sign-On component to validate that the appropriate user is accessing the file, and then securely delivers the file to the user via encrypted transmission using HTTPS.

There are no additional configurations or tools needed for a user to access the Pickup Zone other than the browser they are using to view reports and request downloads.

### **1.1.27 Language Support**

The textual content of the Reporting System is available for viewing and printing in English by default, but users can select alternative languages, including the Spanish and Vietnamese translations provided by Tri-Lin in their capacity as the vendor for Smarter Balanced translations.

### **1.1.28 Legends**

A Legend popup is available on each reporting page. It provides explanations for icons, color choices and other design elements of the reports.

### **1.1.29 Logging**

The Reporting System logs any access to confidential student data. Logs can be accessed by technical staff with appropriate permissions. Instructions are included in technical documentation (Runbooks).

All access to confidential data logs the user information and activities performed with the confidential data.

### **1.1.30 Displaying hidden information**

Information is sometimes hidden to provide additional detail or supporting information that would otherwise make the primary display confusing.

### **1.1.31 Navigation**

- Landing Page - Any user who is not logged in sees a landing page with a link to log in and a small number of links to public resources .

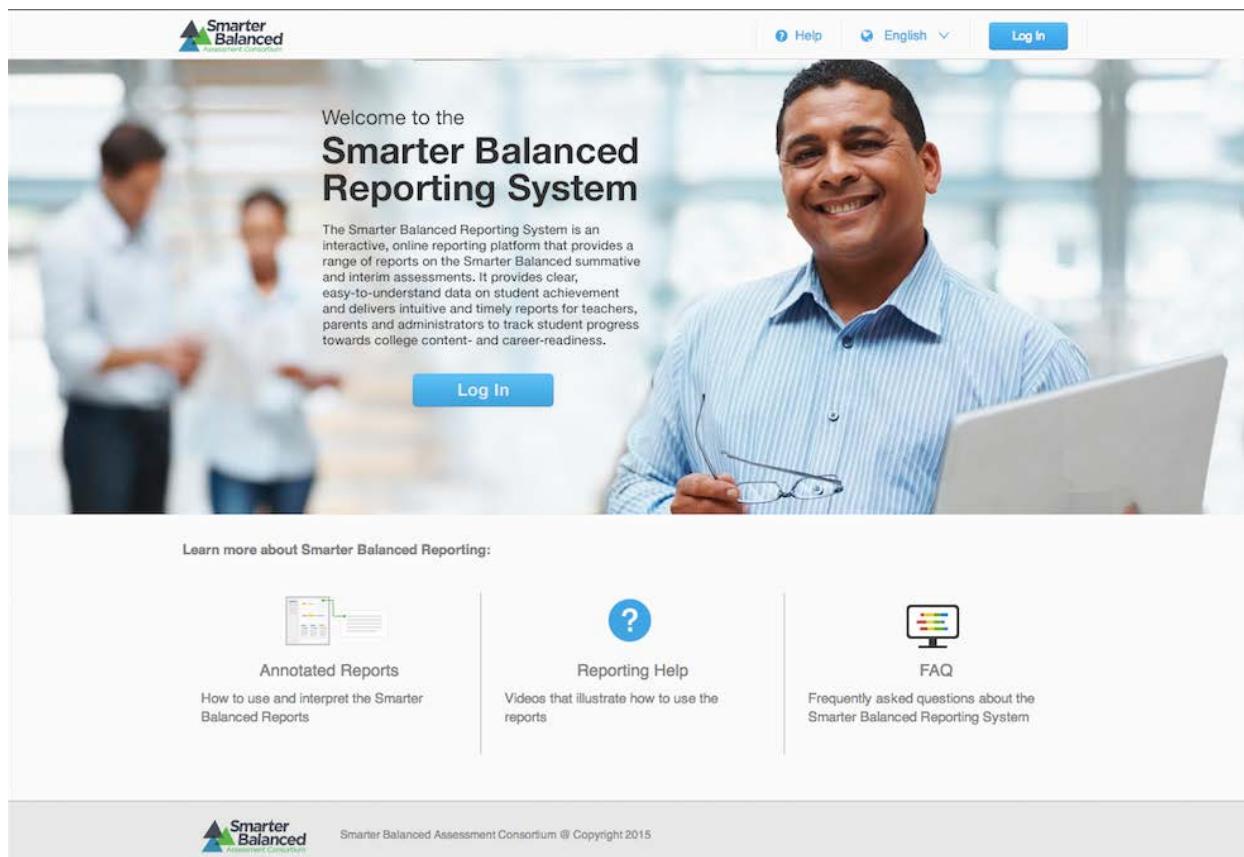


Figure 79 - Reporting Landing Page (for logged out users)

- Breadcrumbs - All reports provide a breadcrumb trail to maintain user understanding of their current location, where each step in the trail is clickable to jump to that page to navigate through the report hierarchy.



Figure 80 - Breadcrumb Navigation

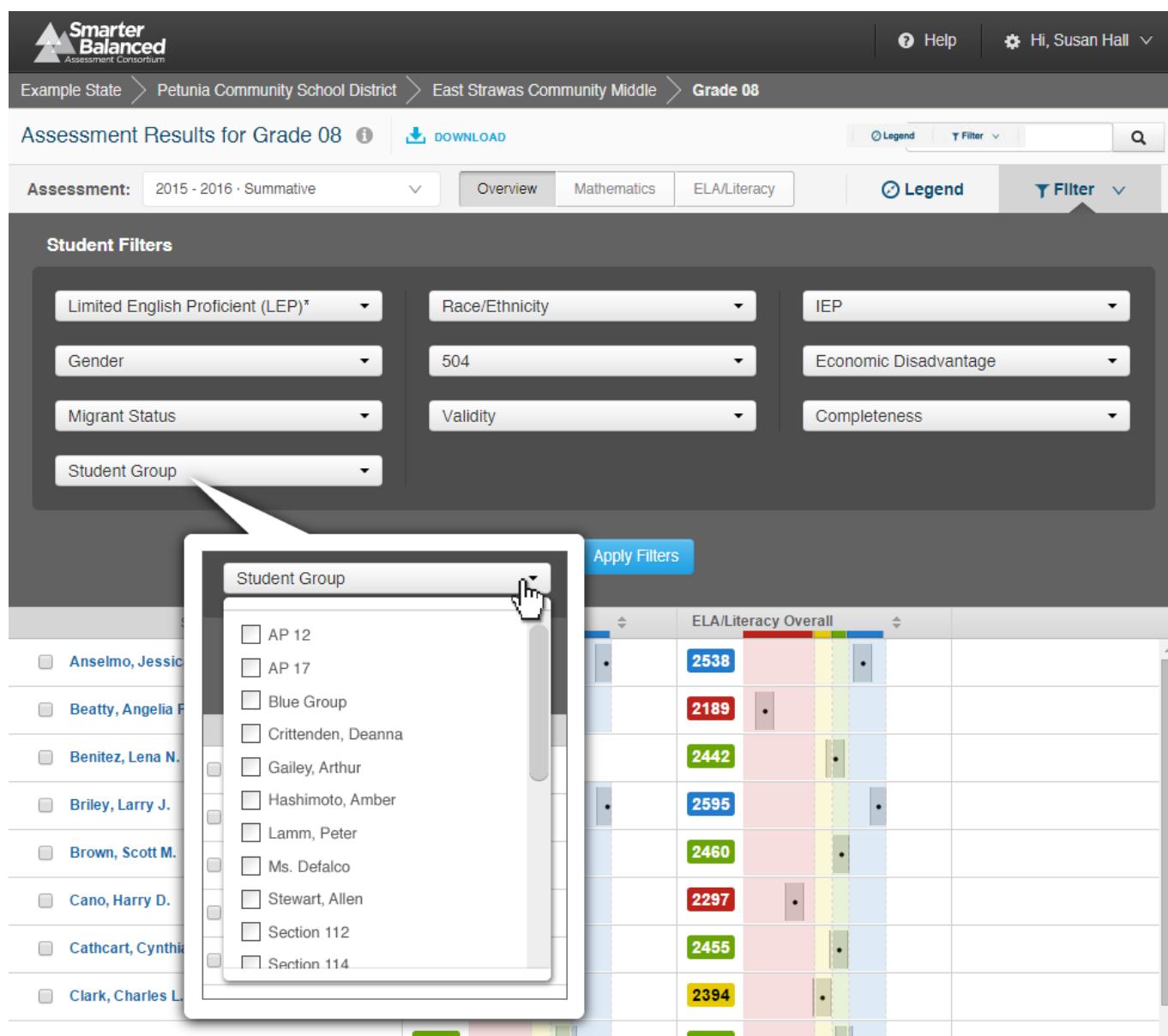
- System provides links to public Digital Library Resources via the **Resources** button.
- Navigation is assessment-data driven, and the system cannot provide navigation to reports for any entities that do not have assessment data; e.g., if a school does not have assessment results in the Data Warehouse, it does not appear in the hierarchical list of aggregations. Conversely, any student record's hierarchy generates the reporting hierarchy; i.e., if a single student's assessment outcome exists, then that student's grade, school, and district are navigable to enable access to that student's Individual STUDENT Report (even if the aggregations are suppressed due to insufficient data).

- System has coherent navigation to and from reports and features, as well as a consistent user experience across stakeholders and reports.
- System does not provide jump-navigation to specific reports for any users based on account information or preferences.

#### **1.1.32 Optional Student Group**

The intent of the student groupings is to provide a facility for states and districts to create optional subgroupings of students smaller than a grade. A possible use for these groupings would be to track teachers and instructors associated with students for filtering through the Reporting System or external systems.

The optional student group is exposed in reports to end users through the List of Students by Assessment GRADE report, as an additional dropdown in the filter section:



The screenshot shows the 'Assessment Results for Grade 08' page. At the top, there's a navigation bar: Example State > Petunia Community School District > East Strawas Community Middle > Grade 08. Below that is a toolbar with 'Assessment Results for Grade 08' (with a help icon), a download button, and filter options ('Legend', 'Filter'). The main area has tabs for 'Overview', 'Mathematics', and 'ELA/Literacy'. The 'ELA/Literacy' tab is selected. On the left, there's a 'Student Filters' panel with dropdowns for LEP, Race/Ethnicity, IEP, Gender, Economic Disadvantage, Migrant Status, Validity, Completeness, and Student Group. The 'Student Group' dropdown is expanded, showing a list of student groups with checkboxes next to them. A mouse cursor is hovering over the 'Apply Filters' button at the top right of the dropdown. To the right of the filters, there's a data grid titled 'ELA/Literacy Overall' with columns for student names and their scores.

	ELA/Literacy Overall
Anselmo, Jessica	2538
Beatty, Angelia F.	2189
Benitez, Lena N.	2442
Briley, Larry J.	2595
Brown, Scott M.	2460
Cano, Harry D.	2297
Cathcart, Cynthia	2455
Clark, Charles L.	2394

Figure 81 - Optional Student Group Filter

The student group filter dropdown is dynamically generated from the students in the grade. All the unique values for any student group (up to 10 student groups may be created in the Test Registration system) are included in the dropdown. For example, for a given fourth grade, the Student Group dropdown contains a list of all unique Student Group values included in the assessment records for any of the students in that grade. Teachers who select their names from the list see only students associated to them in a Student Group.

Within the Student Group dropdown, a user may make multiple selections. If a user makes multiple selections within Student Groups, that filter includes the union-set of students matching the criteria. For example, selecting “Crittenden, Deanna” and “Stewart, Allen” would include all of the students who were in a Student Group for either Ms. Crittenden or Mr. Stewart.

If selections are made in more than one dropdown, then the system returns a set with the intersection of filters. For example, if a user selects “Crittenden, Deanna” as the value for Student Group, and “Yes” as the value for Migrant Status, then the resultant list of students includes only those students who have associations to Ms. Crittenden AND have been marked as “Yes” for Migrant Status.

### 1.1.33 Permissions and Roles

Roles are available for states, districts, and schools to manage access rights to features and information. Roles are managed through the Administration and Registration Tool (ART) component.

Reporting Roles can be applied to specific Client, State, District, and Institution levels, but are not supported for GroupOfInstitutions, GroupOfDistricts, or GroupOfStates.

When a Role is associated with a level higher than Institution, the Reporting System applies that role to all lower-level entities. For example, if a user is given a Reporting PII role at the District level, then they will have access to PII for all Institutions in that District.

For Reporting, the roles available are feature-based, and are additive in that multiple roles will resolve as a union set of access to features. The features covered by roles are:

**Table 10 - Table of Roles**

Role Display Name in ART	Role Description	Role Example
GENERAL	This role is the default for minimum access to the Reporting System, and provides access to aggregate results for all institutions under the associated entities (CLIENT, STATE, DISTRICT, OR INSTITUTION).	Any platform user who should have access to view the aggregate reports for districts in a state, schools in a district, and grades in a school.
PII	This role provides access to individual student assessment results for all institutions under the associated entities (CLIENT, STATE, DISTRICT, INSTITUTION).	Any user who should be able to see individual student assessment results.
SAREXTRACTS	This role provides access to download the reported data in detail for all students covered by the associated entities (CLIENT, STATE, DISTRICT, INSTITUTION).	Any user who should be able to download the assessment results data that drives individual and aggregate reporting. Requires/Depends upon PII access
SRSEXTRACTS	This role provides access to download the state-level Student Registration Statistics export, and should be associated with the STATE entity.	Any user who should be able to download registration statistics for an entire state.
SRCEXTRACTS	This role provides access to download the state-level Student Registration Completion export, and should be associated with the STATE entity.	Any user who should be able to download summative assessment completion statistics for an entire state.

AUDITXML	This role provides access to download the state-level Audit XML download, and should be associated with the STATE entity.	Any user who should have access to download the source XML from Test Delivery for audit or offline analysis. Most likely duly authorized system administrators or researchers.
IIRDTRACTS	This role provides access to download the state-level Individual Item Response Data export for psychometric analysis, and should be associated with the STATE entity.	Any user who should have access to structured response data for CAT and item psychometric calibration. Most likely the Consortium Psychometrician.
ALLSTATES	This role provides access to state navigation, and should be associated with the CLIENT entity.	Any Consortium user who should have the ability to navigate between states. No state data is displayed on the state navigation map.
ASMTDATALOAD	This role is designed for system-level use with the Test Score Batcher API, and should be associated with the STATE entity.	Any duly authorized third-party system. This is not a "user role" for the Reporting System.

### 1.1.34 Personally Identifiable Information (PII) Protection

There are two conditions that, when met, cause the system to suppress aggregated data for all users. Especially to protect the inherent PII in the latter case (when all students are below proficiency), the system displays “Data Suppressed to Preserve Anonymity” instead of an achievement level proportion bar.

- **Minimum Cell Size** - When any aggregation represents fewer than 10 students, the aggregation is not displayed, and the system displays the message “Data Suppressed to Preserve Anonymity”. If a user has authorization to view student PII for the students within that aggregation, clicking the aggregation name allows navigation to the next level down in the reporting hierarchy.
- **All below proficiency** - When educators view aggregate views of student data, if 100% of the students in a given aggregated subpopulation scored in Level 1 and Level 2 (below proficiency), and the educator does not have rights to view the PII of those students, then the application does not display any information about those students. The system displays the message “Data Suppressed to Preserve Anonymity”.
  - This rule only applies if 100 percent of students in a grouping are level 1 or 2.
  - Conversely, if 100 percent of students are level 3 or 4, the information is displayed.

### 1.1.35 Printing, Individual and Batch

#### Individual Printing

The Individual STUDENT Report has a special printer-friendly output in PDF format to ensure all report and supporting information is included in the printout, and should be suitable for distribution to students, parents, and teachers.

All other reports print directly from the browser using the standard {Ctrl+P} print command.

#### Batch Printing

Batch printing is available through the Reporting System to help distribute printed versions of the Individual STUDENT Report.

*List of Students by Assessment GRADE*

The authorized user can request a batch print of the Individual STUDENT Report for all of the students included in the current view. If a user has filtered or selected some subset of students, then the batch print includes only those visible.

*Results by Grade for a SCHOOL*

The authorized user can request a batch print of the Individual STUDENT Report for all of the students in the school or a subset of the school (e.g., certain grades, filtered list). If a user has filtered to a specific subset of students, then the batch print includes only those students who meet the limiting criteria.

To make it easier for users to download and print the Individual STUDENT Reports, the download is split automatically by grade. So a user who requests a download of all the students from a middle school receives three PDF files, one for each grade.

*Comparing Schools in a DISTRICT*

To ensure that reporting system performance is not negatively affected, batch printing is not available at the district level.

*Comparing Districts in a STATE*

To ensure that reporting system performance is not negatively affected, batch printing is not available at the state level.

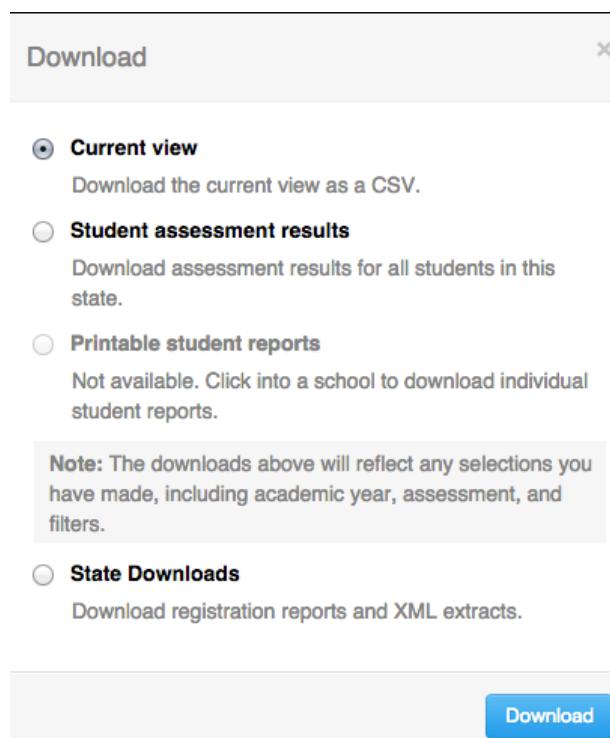


Figure 82 - Download Popup Window

*Download popup window*

When a user clicks the **Download** button on the List of Students by Assessment GRADE or Results by Grade for a SCHOOL reports, the Download window displays (see above).

From that popup window, users can:

- 1) Download the current view as a CSV file - this downloads a CSV version of the current version of the report (including any filters or sorting) into the browser. This allows users to read the data in tabular form.
- 2) Download the student assessment results - this downloads the raw assessment result data (as a CSV file) captured for the summative assessment for all the students whose scores are represented in the current report. This choice is only available to users who have PII access to the underlying students.
- 3) Download printable Individual STUDENT Reports - this downloads the Individual STUDENT Reports for all underlying students in one combined PDF. Clicking this option opens a second popup window (see below).
- 4) State Downloads: A user with appropriate permissions can request state-level downloads.

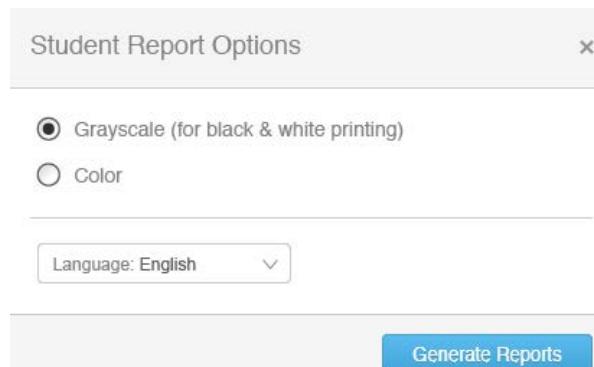


Figure 83 - Printable Student Report options

#### *Report options popup window*

When a user downloads the printable student reports from the Download popup window, a second popup window appears. This window allows the user to customize their batch print job as follows:

- Grayscale (for black and white printing) or color. Grayscale is default
- Language Support - to print the reports in either Spanish or Vietnamese

Once the options are selected and the **Download** button is clicked, a status window then informs users they will receive an email with a secure URL from which to download the file, and the link to the secure URL itself.

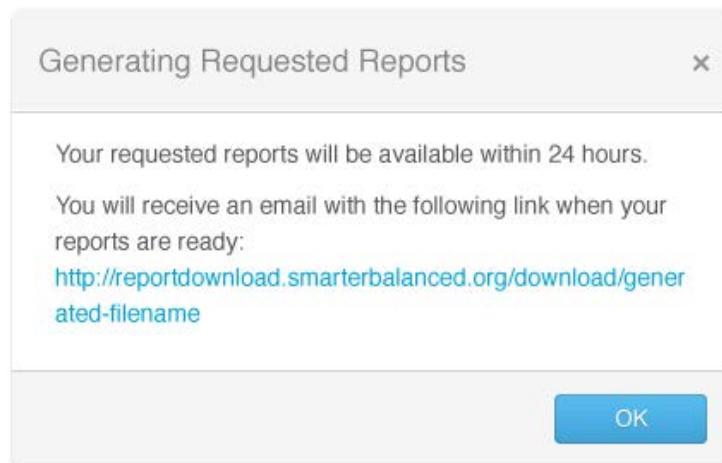


Figure 84 - Download Confirmation Window

#### *Report URL popup window*

When the user clicks the **Download** button on the Report Options popup window, the above popup window appears. It notifies the user that they will receive an email with the URL or URLs (for multiple files) where their file will appear. The user is then able to click the URL to receive their requested file.

Once a user initiates a batch-print request, the job is scheduled in a queue, and it may take some time to complete depending on the size of the queue and other demands on the system. The job includes steps to generate the pages for the selected reports, integrate the individual student reports into one or more large PDF files, and deposit the PDF files to the HTTPS Pickup Zone.

For a batch-print request made from a List of Students by Assessment GRADE report, all selected students are included, and their reports are arranged alphabetically by last name in the large PDF files. At this level, most batch-print requests are less than 1,000 students in a single grade, and therefore likely contained in a single large PDF file. If there are more than 1,000 students, the batch-print is split into multiple PDF files.

For a batch-print request made from the Results by Grade in a SCHOOL report, PDFs are generated separately for each grade, which results in at least one large PDF per grade. If a given grade has more than 1,000 students, then that grade is split into multiple PDF files.

The PII Access permission extends to the Batch Printing feature. If a user does not have PII Access permissions, they do not have the batch print option available.

If users are authorized to see the List of Students by Assessment GRADE report, they have PII Access. However, a user without PII access rights may have access to the Results by Grade for a SCHOOL report; in that case, the user does not see the batch-print download option.

#### **1.1.36 Reporting API**

The Reporting System supports API calls, leveraging the Single Sign-On shared service for authentication. This provides member states the ability to create additional software to integrate with the system. Specific examples of

integration include automating extract triggers between systems or serving an Individual STUDENT Report to an authorized user through a state system.

### **1.1.37 Security**

The Reporting System automatically logs users out after a configurable specified number of minutes with no activity. The period is set by the SSO component and is currently assumed to be 30 minutes.

### **1.1.38 Scale Score**

All reporting is based on scale scores produced by the Scoring component of the Platform. Each subject (mathematics and ELA/literacy) has an overall Composite score and a small number of Claim scores calculated in the Scoring component and integrated by Test Integration into the test XML. Overall scale scores are exposed on the Individual STUDENT Report and the List of Students by Assessment GRADE Report, while Claim scale scores are only exposed through data extract. The scoring integrator component also calculates any Achievement Levels, Categories, Claim levels and Error Bands.

### **1.1.39 Section 508 Compliance**

The Reporting System is in compliance with accessibility requirements specified in Section 508 Amendment to the Rehabilitation Act of 1973, specifically the following subsections:

- 1194.21 - [Software Applications and Operating Systems](#)
- 1194.22 - [Web-based Intranet and Internet Information and Applications](#)
- 1194.31 - [Performance Criteria](#)
- 1194.41 - [Information, Documentation, and Support](#)

Amplify has reviewed the system to ensure that information is equitably accessible.

### **Individual STUDENT Report**

The Individual STUDENT Report has a special PDF print capability, but does not provide a non-visual/tabular download. The report can be navigated using the keyboard and accessed in screen readers. The visual design elements are rendered in sufficient color contrast

### **List of Students by Assessment GRADE**

For a List of Students by Assessment GRADE, the user must have access to PII to view the report; therefore anyone who can see this report can download either or both of the following extracts:

1. **Download Current View as CSV** - This provides the user with a full extract of the assessment outcomes only for the students that are visible at the time, as it takes into account the state of all sort, filter, and selection options.
  - a. For Mathematics and ELA/literacy view, this CSV file provides the Overall scale score, Overall error-band, and Overall achievement-level data for both subjects for each student.
  - b. For Subject-Detail view, this CSV file provides the Overall scale score, Overall error band, Overall achievement level, and the Level (1, 2, 3) and Label (Below, At/Near, Above Standard) for each Claim in the selected subject.

A	B	C	D	E	F	G	H	I	J	K
1 Report Name	Assessment Results for Grade 08									
2 Date	11/21/2015 14:20									
3 Report Info	Example State, Petunia Community School District, Adenbell Middle, Grade 08									
4 Sort By	Students									
5 Compare	Off									
6 Assessment Type	2015 - 2016 · Summative									
7 Total Count	53									
8 Academic year	2015 - 2016									
9										
10										
11	Students	Mathematics Overall	Mathematics Error Band	Mathematics Performance Level	Mathematics Performance Level Number	Mathematics Status	ELA/Literacy Overall	ELA/Literacy Error Band	ELA/Literacy Performance Level	ELA/Literacy Performance Level Number
12 Allan, Greg N.		2549	2524-2574	Level 4		4		2567	2542-2592	Level 4
13 Andrade, Monica L.		2449	2424-2474	Level 3		3		2458	2433-2483	Level 3
14 Anthony, Ana M.		2503	2478-2528	Level 4		4		2573	2548-2598	Level 4
15 Barragan, Brooke R.		2607	2582-2632	Level 4		4		2504	2479-2529	Level 4
16 Bland, Larry H.		2465	2440-2490	Level 3		3		2453	2428-2478	Level 3
17 Breen, Anna P.		2437	2412-2462	Level 3		3		2470	2445-2495	Level 3
18 Burg, Antonio N.		2503	2478-2578	Level 4		4		2482	2467-2517	Level 4

Figure 85 - List of Students by Assessment GRADE, Download Current View as CSV example

2. **Download Student Assessment Results** - This provides the user with a full extract of the assessment outcomes for all the students in the GRADE (see also Section 2.2.1 - Student Assessment Results).

## Results by Grade for a SCHOOL

All users can download the current view.

Only users with PII access for the SCHOOL can download the raw data for the SCHOOL.

1. **Download Current View as CSV** - This provides the user with a full extract of the assessment outcomes only for the aggregations visible at the time, as it takes into account the state of all sort, filter, and selection options.
  - a. This CSV file provides the counts and percentages for every achievement-level proportion bar on the screen.
  - b. If there is “Data Suppressed to Preserve Anonymity”, the CSV file is suppressed in the same way as the report display; i.e., the rows are represented but there are no counts or percentages wherever “Data Suppressed to Preserve Anonymity” is displayed.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Report Name	Grades in Capearlins Primary											
2	Date	11/23/2015 14:20											
3	Report Info	Example State,Texas,Petunia Community School District,Capearlins Primary											
4	Sort By	Grade											
5	Compare	Off											
6	Assessment Type	Summative											
7	Total Count	3											
8	Academic year	2015 - 2016											
9													
10													
11	Grade	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics	Mathematics	ELA/Literacy	ELA/Literacy	ELA/Literacy
		Level 1 Count	Level 1 Percentage	Level 2 Count	Level 2 Percentage	Level 3 Count	Level 3 Percentage	Level 4 Count	Level 4 Percentage	Total Assessed	Level 1 Count	Level 1 Percentage	Level 2 Count
12	Capearlins Primary	10	6%	51	31%	77	47%	26	16%	164	9	6%	53
13	Grade 03	5	9%	20	34%	27	47%	6	10%	58	5	9%	20
14	Grade 04	Data Suppressed to Preserve Anonymity											
15	Grade 05	2	4%	13	26%	22	44%	13	26%	50	2	4%	15
16													
17													
18													

Figure 86 - Download Current View as CSV - Suppressed Data

Again, only users with PII access for the SCHOOL can download student assessment results:

2. **Download Student Assessment Results** - This provides the user with a full extract of the assessment outcomes for all the students in the SCHOOL (see also Section 2.2.1 - Student Assessment Results).

## Comparing Schools in a DISTRICT Report

All users can download the current view.

1. **Download Current View as CSV** - This provides the user with a full extract of the assessment outcomes only for the aggregations visible at the time, as it takes into account the state of all sort, filter, and selection options.
  - a. This CSV file provides the counts and percentages for every achievement-level proportion bar on the screen.
  - b. If there is “Data Suppressed to Preserve Anonymity,” the CSV file is suppressed in the same way as the report display; i.e. the rows are represented but there are no counts or percentages wherever “Data Suppressed to Preserve Anonymity” is displayed.

	A	B	C	D	E	F	G	H	I	J	K
1	Report Name	Comparing Schools in Gnatcatcher Goosefish School District on Math & ELA									
2	Date	2-13-2014 9:27:49									
3	Report Info	Example State,Gnatcatcher Goosefish School District									
4	Sort By	School Name									
5	Compare	Off									
6	Assessment Type	Summative									
7	Total Count	146									
8											
9											
10											
11	School Name	Math Level 1 Count	Math Level 1 Percentage	Math Level 2 Count	Math Level 2 Percentage	Math Level 3 Count	Math Level 3 Percentage	Math Level 4 Count	Math Level 4 Percentage	Math Total Assessed	ELA Level 1 Count
12	Gnatcatcher Goosefish District Overall	1,059	7%	3,535	23%	6,781	45%	3,766	25%	15,141	1,843
13	Ardvark Bittern Elem	3	3%	12	14%	49	56%	24	27%	88	13
14	Ardwolf Kelpfish Elem	7	8%	23	26%	37	42%	21	24%	88	17
15	Alder Manefish Jr Middle	13	8%	47	27%	64	37%	49	28%	173	20
16	Angelica Dogfish Primary	3	4%	10	12%	48	58%	22	26%	83	8
17	Angelica Gildib Elen	7	7%	26	28%	39	42%	22	23%	94	12
18	Antbird Yarrow Jr Middle	9	6%	29	18%	74	46%	47	30%	159	19
19	Antwren Coast Primary	19	22%	43	49%	16	18%	10	11%	88	17
20	Babakoto Ermine Primary	5	6%	23	27%	36	42%	21	25%	85	14
21	Badger Wildebeast Junior High	7	5%	24	19%	59	46%	39	30%	129	18
22	Batfish Goat Primary	6	7%	23	26%	37	43%	21	24%	87	17
23	Batfish Redwood Middle School	9	6%	28	18%	71	46%	45	30%	153	14
24	Becard Hermit Elementary School	3	4%	11	13%	46	55%	24	28%	84	10
25	Bird Grouper Elem	c	7%	24	10%	25	44%	11	7%	80	11

Figure 87 - Download Current View as CSV aggregate report

Again, only users with PII access for the DISTRICT can download Student Assessment Results:

1. **Download Student Assessment Results** - this provides the user with a full extract of the assessment outcomes for all the students in the DISTRICT (see also Section 2.2.1 - Student Assessment Results).

## Comparing Districts in a STATE Report

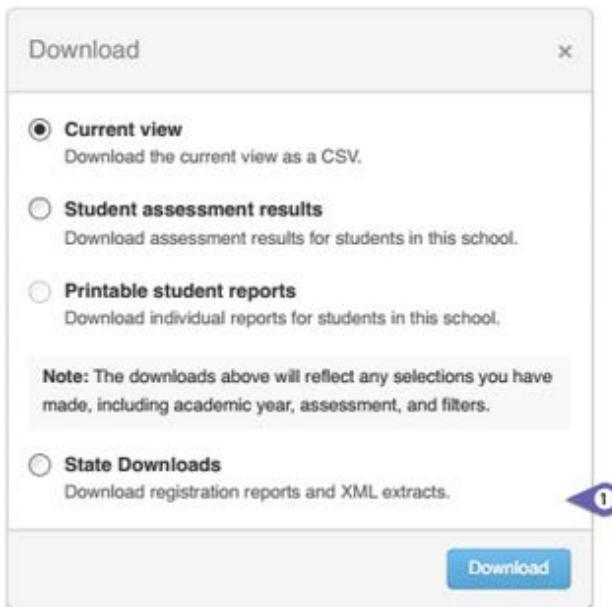


Figure 88 - Comparing Districts in a STATE: Download options

All users can download the current view.

1. **Current View** - This provides the user with a full extract of the assessment outcomes only for the aggregations visible at the time, as it takes into account the state of all sort, filter, and selection options.
  - a. This CSV file provides the counts and percentages for every achievement level proportion bar on the screen.
  - b. If there is “Data Suppressed to Preserve Anonymity”, the CSV file is suppressed in the same way as the report display; i.e. the rows are represented but there are no counts or percentages wherever “Data Suppressed to Preserve Anonymity” is displayed.

A	B	C	D	E	F	G	H	I	J	K
1 Report Name	Comparing Districts in Example State on Math & ELA									
2 Date	2-13-2014 9:29:8									
3 Report Info	Example State									
4 Sort By	District Name									
5 Compare	Off									
6 Assessment Type	Summative									
7 Total Count	39									
8										
9										
10										
11 District Name	Math Level 1 Count	Math Level 1 Percentage	Math Level 2 Count	Math Level 2 Percentage	Math Level 3 Count	Math Level 3 Percentage	Math Level 4 Count	Math Level 4 Percentage	Math Total Assessed	ELA Level 1 Count
12 ES State Overall	8,171	10%	26,111	30%	32,796	38%	19,200	22%	86,278	11,759
13 Acacia Kangaroo SD	111	9%	353	30%	450	39%	253	22%	1,167	154
14 Addax Elderberry SD	110	10%	333	30%	432	39%	242	21%	1,117	126
15 Amaryllis Redfish Schools	127	11%	381	34%	400	35%	229	20%	1,132	142
16 Badger Velvetine Schools	126	11%	375	32%	416	30%	238	21%	1,155	139
17 Beaver Birch Woods Schools	41	5%	185	22%	402	47%	220	26%	848	100
18 Bittern Angus SD	55	7%	211	29%	284	39%	183	25%	733	117
19 Blackbird Flicker Public Schools	42	5%	184	22%	412	47%	210	26%	849	101
20 Boarish Zebra County Schools	54	7%	209	28%	292	40%	180	25%	735	102
21 Butterfish Cardinal SD	125	12%	366	35%	350	33%	208	20%	1,049	136

Figure 89 - Download Current View as CSV aggregate report

Any users with state extract access can request state data as bulk extract.

2. **Student Assessment Results** - Selecting this option opens an additional dialog, allowing for the selection of state-extract-type, assessment type(s), subject(s). The download contains all Student Assessment Results for the state that meet the specified criteria and is provided via the HTTPS Pickup Zone to the requesting user.

#### **1.1.40 Summative Assessments**

Reports of summative assessment results are end-of-year status reports, and are primarily used for student-parent-teacher level-setting and administrative review. Because of the well-defined administration parameters and process in place, the Consortium has approved reporting of summative assessment outcomes from individual students to the grade, school, district, and state levels. Reports provide aggregations of summative assessment outcomes for districts, schools, and grades. These aggregations are presented as Achievement Level proportion bars, and provide summary information about student performance in terms of grade-specific standards.

#### **1.1.41 Tenancy**

- All user accounts (except Consortium administrators) provide access to one state only.
- Registered users within one state do not have access to another state's data.
- Each state registers its users independently.
- A user who maintains roles in two states (e.g., administrator in one, teacher in another) has two user logins, one for each state's data tenant.
  - Parents and students do not have logins or user accounts in the Smarter Balanced SSO.

#### **Tenancy Personae:**

For the use cases listed below, it was helpful to provide specific, named examples of user situations:

- Marty has a system role of Consortium administrator
- John is a district administrator in Oregon
- James is a district administrator in Oregon and a teacher in a separate Oregon district
- Linda is a district administrator in Oregon and a teacher in Washington
- Henrik is an unregistered education consultant in Norway

#### **Tenancy Use Case 1**

Registered users can only see data in their states.

- John from Oregon logs in and can only see data for Oregon.
  - John cannot see any reports for any other state while logged in as John from Oregon.
- James can freely explore all Oregon reports that he has access to in his various roles
  - James cannot see any reports for any other state while logged in as James from Oregon.

## Tenancy Use Case 2

All registered user accounts belong to one state unless they have the Consortium Administrator role, in which case they can access all states.

- If users maintain roles in multiple states, they have separate logins for each state
  - Linda must log in with her Oregon credentials to explore Oregon's reports, and cannot see Washington's reports.
  - Linda must log out from her Oregon account and log in with her Washington account to see Washington reports (and then cannot see Oregon reports).
  - Marty logs in and can select from among all states to explore reports (including any to which she has PII access) and initiate extracts.

## Tenancy Use Case 3

There is no support for anonymous public users (i.e., unregistered, logged out, or not logged in).

- If Henrik somehow gets a URL to the Reporting System, he cannot see anything except the logged out landing page with publicly available support materials.

## Technical Requirements

### 1.1.42 Viewing reports

Reports are designed to be viewed using standard up-to-date browsers running on most available hardware:

- Chrome version 31 or higher (Windows and Mac)
- Firefox version 26 or higher (Windows and Mac)
- Internet Explorer 9 or higher (Windows only)
- Safari 7 or higher (Mac only)

Otherwise for Reporting System users, the technical requirements for viewing reports do not exceed or extend the technology readiness requirements established by Smarter Balanced.

### 1.1.43 Data Sources

AIR (as vendor for RFP-11 Test Delivery System, including Test Score Integrator) has committed to implementing, in the operational system, all calculations required to support the data requirements specified by the Consortium through the course of work completed with vendors.

### 1.1.44 Reporting Technology Stack

The reports are built on top of the Data Warehouse using the following technologies:

#### Client Side Technologies

CoffeeScript, RequireJS, jQuery, Mustache, Bootstrap, qUnit

#### Server Side Technologies

Python 3.x, Pyramid, SQLAlchemy, Zope Components

#### Database/Middleware

Postgresql 9.x, pgbounce, pgpool-II, repmgr, memcached

#### Testing Tools

pyUnit, nose, selenium/webdriver, sqlite

#### Other Software

[apache tomcat](#) - open source Java Servlet / JavaServer Pages technologies

[nutcracker](#) - open source tool to support animations

[wkhtmltopdf](#) - open source html-to-pdf generator using webkit

[Celery](#) - open source asynchronous task queueing

[GlusterFS](#) - open source distributed file system

[RabbitMQ](#) - open source intra-component messaging

## Member-State Configuration and Extension of the Reporting System

The Smarter Balanced Reporting System provides member states the ability to configure:

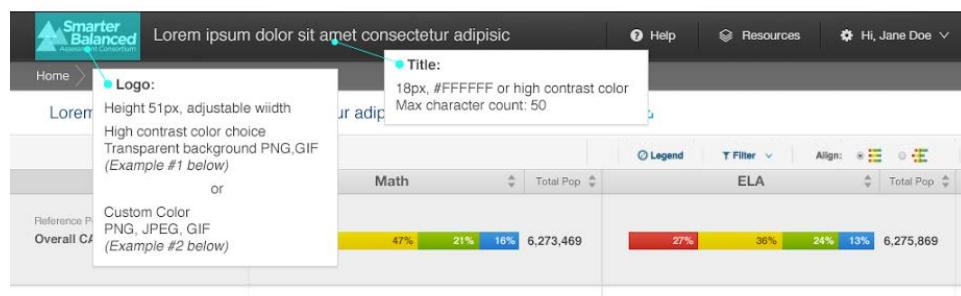
- 1) The graphic logo and title area that applies to all online reports
- 2) Direction to state resources for college content and career readiness

More extensive customization and extension of the Smarter Balanced Reporting System and Data Warehouse components are made possible through member state access to content and source code. Member states that choose to implement their own instance of the reporting system can modify descriptive text to align with their particular needs; all content structures/constraints/etc. are included in the technical documentation.

### 1) State Logo and Title

The Reporting System currently includes the Smarter Balanced logo in the upper-left corner of the navigation area. States may update their instances to display a state logo. Transparent/color background logo choice is left up to the state designer, but the process is a simple image swap:

Tenant Branding Specs



Logo:  
Height 51px, adjustable width  
High contrast color choice  
Transparent background PNG,GIF  
(Example #1 below)  
or  
Custom Color  
PNG, JPEG, GIF  
(Example #2 below)

Title:  
18px, #FFFFFF or high contrast color  
Max character count: 50

Example 1:



Hawaii Reporting

Home > Hawaii

Example 2:



Hawaii Reporting

Home > Hawaii

Figure 90 - Member State Customizable Logo and Title

### 2) College Content-Readiness Resources

Smarter Balanced has determined that each state may customize the content of one area for their 11th grade student reports to include a link, pointer, or other direction to state-maintained college content and career readiness materials.

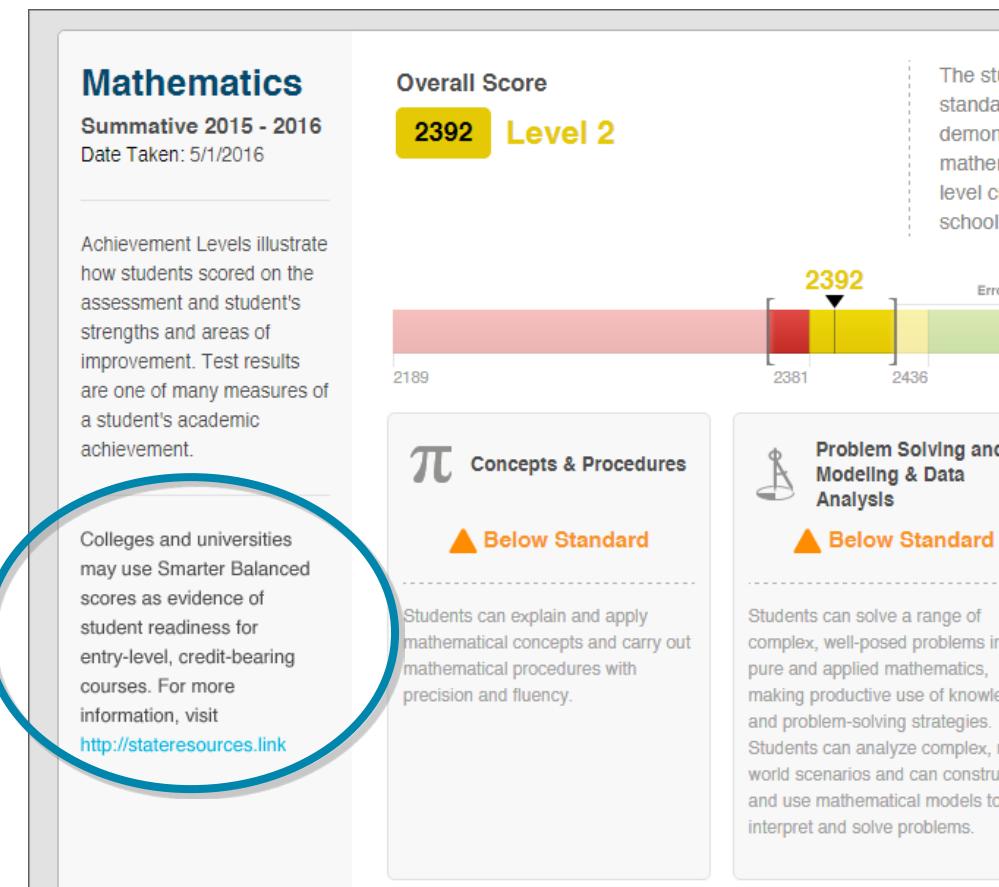


Figure 91 - Member State Configurable Resources

Applying the state-provided content is a system configuration.

## Documented Assumptions and Clarifications

### 1.1.45 Truth at Test Time

The Reporting System provides snapshots of student performance at a moment in time. Reports are organized by the information available provided by the Test Delivery System at the time of assessment, including student information and attribution information. Testing hypothetical situations or extrapolations are not supported.

### 1.1.46 Data-Driven Hierarchy

Individual student records drive all the reports, and the reporting hierarchy is derived from those records. Any attribution or grouping information is provided at test time by the Test Delivery System, and is not managed or maintained in the Data Warehouse or via the Reporting System.

### 1.1.47 Enrollment

The Data Warehouse and Reporting System solution is an assessment reporting system and does not have an operational or transactional data store to support reporting on enrollment. It may be used in conjunction with a system that does.

### **1.1.48 Instructional Use**

The Digital Library is a good source for additional tools and modules that help address instructional questions that may be raised by inferences supported by assessment results.

### **1.1.49 Statistical Analysis**

The Data Warehouse contains sufficient information to support statistical analysis, and the download/extract capabilities provide the ability to export data to more fully-featured statistical solutions such as SPSS, Minitab, R or Microsoft Excel. The Data Warehouse's star schema structure supports integration with OLAP tools.

### **1.1.50 Longitudinal Data and Student IDs**

All data in the Data Warehouse is implicitly longitudinal, in that all results for a given student are connected by that student's ID.

- Version 1 of the system provides reporting designed for one year of data due to additional requirements gathering needed for appropriate display of data over time.
- Amplify provides visual design services to document direction for future reporting capabilities, including the following year-over-year reports:
  - Reporting on multiple years of summative data for Comparing Districts in a STATE, Comparing Schools in a DISTRICT, and Results by Grade for a SCHOOL reports
  - Reporting on multiple years of summative and interim comprehensive assessment data for the List of Students by Assessment GRADE report
  - Reporting on multiple years of summative and interim comprehensive assessment data for the Individual STUDENT Report
- The identity management systems of each state are responsible for reconciling multiple student IDs generated for a single student into a single student ID.
- The Reporting System is dependent on the state identity management systems to provide student IDs.

### **1.1.51 Comparing Aggregates**

- The Reporting System compares aggregates to each other via the following reports:
  - Comparing Districts in a STATE
  - Comparing Schools in a DISTRICT
  - Results by Grade for a SCHOOL
- The Reporting System provides the ability to filter to subpopulations of interest across aggregates, including by grade(s), demographics, and school programs.
- The Reporting System does not provide a way to directly create a gap analysis. Sophisticated cross-tabs and conditional analyses are supported only by external tools populated through data extracts.
  - For example, the Reporting System does not provide a way to analyze fifth grade summative mathematics assessment and compare Hispanic LEP males to non-Hispanic, non-LEP males.
  - The Reporting System does not provide multi-year aggregate reporting or comparison between assessment administrations. The Data Warehouse provides data extracts to support offline calculation of trend or growth data.
- As requested by the Consortium, the Reporting System does not support comparisons between different states.

#### **1.1.52 Group and Permission Definitions**

- Configuration of user groups and permissions are maintained through the SSO shared service. Users are associated with school(s)/district(s)/and state(s) by their state.
- All user associations are passed to the Data Warehouse by the state identification management system.

#### **1.1.53 System Functionality Restrictions**

- System functionality in the Data Warehouse and Reporting System is granted or restricted to user groups or entities, including Smarter Balanced, state, district, and school building levels by system administrators.
- Permissions are feature-based.

#### **1.1.54 Statistical Support**

- The Data Warehouse and Reporting System contain and make available data to allow for:
  - Conditional Analyses - Basic conditional analyses are achievable through filtering of reports. More advanced analyses require external tools applied to data extracted from the Data Warehouse.
  - Basic Inferential Tests - Offline regressions (e.g., psychometric calibration, state/district custom metrics) require the use of external tools applied to data extracted or downloaded from the Data Warehouse.
  - Frequencies - They are available in both the Comparing Populations and Results by Grade for SCHOOL reports.
  - Crosstabs - They require the use of external tools applied to data extracted from the Data Warehouse.
- The Data Warehouse and Reporting System do not support:
  - Descriptive Statistics - As per direction of Psychometric validation partner ETS, Amplify recommends against publishing mean or quartile scores for a given aggregation.

#### **1.1.55 Availability of Data**

- Reports and data are made available as soon as incoming assessment results are completely processed.
- Assessment results are provided to the Reporting System by a Test Score Integrator which integrates all the scoring information into a final set of scale scores, error bands, cut-scores, and achievement levels and provides a bulk upload of assessment results for a given administration (e.g., DE 2017 Grade 6 Summative ELA). Reporting latency is primarily driven by Scoring latency.
- The service level agreement for reporting is:
  - Upon receipt of data from Test Integration, data will be visible in the Reporting System within 24-96 hours.
  - This agreement is subject to change as specifications and hardware characterizations are finalized.
- The service level agreement for data extracts may be longer than 96 hours but is dependent on system activity and available resources.
- Data and reports are released to all users with the appropriate level of access as and when the data are processed, which depends on the aggregation rules in effect in the source system. There is no timed, staged, or staggered release of reports, and data are not embargoed for any period of time, i.e. as soon as an assessment result is live in the Data Warehouse, the assessment result is reportable and reported on.