



Ohio Department of Education

# SAS<sup>®</sup> EVAAS<sup>®</sup> Development Plan and Statistical Documentation for 2013 Processing

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# 1 Overview

This document outlines the procedural steps necessary for SAS EVAAS to deliver the 2012-2013 value-added estimates and individual student projections to future tests, and prepare for Web-based teacher reporting.

The timeline for this contract year assumes a timely delivery of clean and usable data, and acknowledges the critical need to meet the Ohio Department of Education's (ODE's) state and federal reporting requirements.

Cristina Dorne is the single point of contact for this contract cycle. Her email address is [cristina.dorne@sas.com](mailto:cristina.dorne@sas.com), and her office phone number is (919) 531-1558. Other SAS EVAAS staff members will participate in meetings and conversations as needed.

**Table 1: Proposed Timeline for SAS EVAAS Deliverables to ODE (all dates are in 2013)**

Phase	Deliverables	Estimated Date
1	Development Plan and Statistical Documentation for 2013 Processing	May
2	State accountability metrics	August 9
2	Scale stabilization, analytics, Web reporting	September 5
3	Diagnostic analytics and Web Reporting	September 5
3	Race To The Top Teacher Reports	September 24
3	Demonstration Site	TBD

**Table 2: Proposed Timeline for ODE Deliverables to SAS EVAAS (all dates are in 2013)**

Deliverable	For more information, see...	Date Expected
Sender-receiver school pattern		June 14
<ul style="list-style-type: none"> <li>File description and codes definition for all files to be delivered to SAS EVAAS for the 2013 processing year</li> <li>File containing the frequency counts for scale scores for each grade and subject</li> </ul>	Section 2.1.1 on page 3	July 3
Spreadsheet containing account information for each district administrator	Section 5.1 on page 13	June 14
Student achievement files	Section 2.1.1 on page 3	July 26
List of districts that do not want student names displayed	Section 4.1 on page 6	June 14
Enrollment data	Section 4.1 on page 6	Varies by submission window

## 2 Phase 1






### 2.1 Development Plan

#### 2.1.1 State Accountability Metrics

SAS EVAAS will provide ODE with the following:

- Estimates of the influence of school districts and buildings on the academic gain of student populations to be used in the state accountability model.
- District and school value-added effects for each subject and grade tested in consecutive year/grade combinations. Value-added results will be reported for the Ohio Achievement Assessment (OAA) in math and reading for fourth through eighth grades.
- Beginning in 2013, five letter grades, A, B, C, D, and F will be assigned for this growth measure.
- Beginning in 2013, in addition to current year estimate for math, reading, and composite for each grade and across grades, multi-year averages for math, reading, and composite for each grade and across grades for up to three years will also be provided.
- Beginning in 2013, district and school value-added effects disaggregated for each of the following subgroups: students identified as gifted in mathematics or reading (or superior cognitive in the case of both mathematics and reading), students with disabilities, and students whose performance places them in the lowest quintile for achievement on a statewide basis. Each subgroup will be a separate graded measure. Value-added results for each subgroup analysis will be reported for math, reading, and composite across grades for the current year.
- Beginning in 2013, lists of SSIDs by subject/grade/accountable school/accountable district for students included in each of the three subgroup analyses.
- Beginning in 2013, an additional community school closure file for all community schools. Only students that are tested in a community school for both the current and the prior year will be included in the analysis. A list of community schools (with associated SSID's) will be provided by ODE. Composite value-added results will be reported across grades for the current year.

**Table 3: Definitions of grade-coded growth levels for districts and schools**

Growth Level	Letter Grade
Gain is at least two standard errors above the growth standard	A 
Gain is at least one standard error above the growth standard but less than two standard errors above it	B 
Gain is greater than or equal to one standard error below the growth standard but less than one standard errors above it	C 
Gain is greater than or equal to two standard errors below the growth standard but less than one standard errors below it	D 
Gain is more than two standard errors below the growth standard	F 

The 2013 growth standard to be used for assessing the effectiveness of districts and schools is the same as the growth standard used in 2010 and represents the average progress of the Ohio student

population in the 2010 testing. The growth standard is defined in terms of normal curve equivalent (NCE) gains. For example, a difference in NCE scores of zero means that the student has maintained the NCE ranking from one grade to the next. A growth standard using NCE scores does not necessarily dictate that the gain from one grade to the next must be zero – a positive gain on the NCE scale can be determined to be appropriate. The growth standard can be reassessed on a year-to-year basis as requested by the Ohio Department of Education.

To be used in SAS EVAAS reporting, testing must meet three criteria:

1. The test must have a high correlation with curricular objectives.
2. The test must have the capacity to effectively measure the academic performance of students across the entire achievement spectrum; that is, the performance of students at lower achievement levels as well as the performance of the state's highest achieving students.
3. The test must provide reliable measures year-to-year for a grade and subject; that is, the scaling of the test must be equivalent across years.

At the request of ODE, SAS EVAAS evaluated the stability of the OAA test scaling and assessed methods to stabilize the scales. Appendix D on page 31 provides a link to a white paper that describes the evaluation and methods to stabilize the scales. Approved by ODE in the contract modifications for 2010, SAS EVAAS implemented the scale stabilization for the 2009-2010 school value-added analysis and will continue to implement the scale stabilization methods for future years' test data. The baseline year for the stabilization is 2010 as specified by ODE in July 2010.

The SAS EVAAS analyses will be completed using the filtering rules for school- and district-level reports provided by ODE. ODE will provide the file description and codes definition for all files to be delivered to SAS EVAAS for the 2013 processing year in sufficient time for any programming adjustments to be made (SAS EVAAS would tentatively expect the delivery date to be July 3, 2013). ODE will also supply a file containing the frequency counts for scale scores for each grade and subject by July 3, 2013. ODE assumes responsibility for the integrity and completeness of the student files delivered for the 2013 processing cycle. The delivery of the student achievement files to SAS EVAAS is to be early on the day of July 26, 2013. The estimated delivery date of the state accountability files from SAS EVAAS to ODE is to be August 9<sup>th</sup>. This window includes additional days for the scale stabilization process, the subgroup analyses, and the community school closure analysis. The accountability files will be delivered in a new format with new code definitions in 2013.

## 2.2 Statistical Documentation of State Accountability Models

SAS EVAAS's statistical methodology for the analysis of the Ohio Achievement Assessment data uses multivariate longitudinal mixed models. The statistical methodology described in this section is documented at <http://www.sas.com/resources/asset/SAS-EVAAS-Statistical-Models.pdf>. This methodology is commonly referenced as SAS EVAAS MRM (multivariate response) value-added modeling. The EVAAS methodology deployed in Ohio allows for the use of Normal Curve Equivalent (NCE) scores that are based on the stabilized statewide distribution of scale scores (Appendix A on page 15 describes how SAS EVAAS calculates NCE scores. Appendix D on page 31 provides a link to a white paper that describes the evaluation and methods to stabilize the scales).

Unique student identifier information enables SAS EVAAS to track students longitudinally. Starting in 2011, students are merged across the state for determining gains from one year to the next. SAS EVAAS methodology also requires that growth standards for each subject be available. SAS EVAAS will use the

growth standards for each subject from one grade to the next as approved by the Ohio Department of Education.

SAS EVAAS will analyze all district and school models in a manner that is as uniform and consistent with the data as possible. Adjustments, such as those to address student mobility, will only be applied based on empirical evidence that supports the use of such adjustments to limit biasing the results. An analysis of any such adjustments will be reported by SAS to ODE in a technical report no later than December after the release of the reports.

### 3 Phase 2

SAS EVAAS will provide ODE with district and school accountability files based on the 2013 reporting in the same format as was provided in 2012.

#### 3.1 Procedures to Ensure 2012-2013 Processing Requirements

To ensure that the delivery to meet the state reporting mandates in a timely fashion, SAS EVAAS will complete any necessary software revision and testing prior to receipt of student test scores from ODE. Assuming that ODE provides clean, usable data for the 2013 processing cycle, SAS EVAAS will continue to deliver comparable services to those of 2012 within the specified timeline. ODE pledges to have a 24/7 contact with decision making authority available to SAS EVAAS via phone during that processing time.

#### 3.2 Data Sets for ODE Value-Added Accountability

Table 4: Files for District and School Accountability

District level	<ul style="list-style-type: none"> <li>• District IRN</li> <li>• Reading value-added score for grades 4-8</li> <li>• Math value-added score for grades 4-8</li> <li>• Overall value-added score</li> </ul>
School level	<ul style="list-style-type: none"> <li>• Building IRN</li> <li>• District IRN</li> <li>• Reading value-added score for grades 4-8</li> <li>• Math value-added score for grades 4-8</li> <li>• Overall value-added score</li> </ul>

Value-added results for the subgroup analysis will be provided in separate files for each of the following subgroups: gifted in mathematics, gifted in reading, superior cognitive, students with disabilities, and students in the lowest quintile for achievement.

Lists of SSIDs by subject/grade/accountable school/accountable district for students included in the subgroup analysis will be provided in a separate file for each subgroup.

Value-added results for the community school closure analysis will be provided in a separate file.

#### 3.3 The Baseline Year

ODE requested that SAS EVAAS reset the baseline year to 2010 before delivering the 2010 value-added analysis. This baseline year (2010) is to be used in the 2013 value-added analysis for math and reading.

SAS EVAAS reviewed the frequencies of valid scores from 2009 to 2010 and conducted a second review after the individual student scores for all tested students were received. SAS EVAAS verified that using 2010 as the new baseline year would be acceptable. Appendix D on page 31 provides a link to a white paper that describes the evaluation and methods to stabilize the scales.

## 4 Phase 3

### 4.1 Files for Web Reporting

1. Student level
  - a. Names: Building IRN, District IRN, student identification number, student first name, student middle initial, and student last name. A file with this information will be sent by Battelle for Kids per its receipt from IBM. ODE will provide a list of districts that do not want student names displayed so that SAS EVAAS can suppress student names for those districts.
  - b. Enrollment: There will be monthly deadlines for submitting currently enrolled student information to SAS EVAAS by the ITCs and districts. The Web reporting will be updated on a rolling basis on the last Thursday of the following month.

Table 5: Tentative monthly incoming data schedule

Submission Window	Dates
1	July 16 to August 15
2	August 15 to Sept 30
3	October 1 to October 31
4	November 1 to November 30
5	December 1 to December 31
6	January 1 to January 31
7	February 1 to 28

4. Students will be linked to the attributed district and school (for state and federal accountability reporting) as well as the tested school.
5. For districts that submit current enrollment data, students will be linked to their current districts and schools. Note that the procedure for submitting current enrollment data was changed in 2012 to allow districts to submit current enrollment data when the previous district or school are not known or are in a different district.
6. SAS EVAAS will display student-level projections if the student is currently enrolled but does not have testing data in the current year. This will allow projections for students currently enrolled in ninth grade to have projections to tenth grade even though they do not have any current testing data.

The reports listed in section 4.2 below will be available through June 30, 2014 in accordance with specifications noted in the contract.

### 4.2 Deliverable Value-Added Web Reports

#### 4.2.1 District Reports

1. District Value-Added Report for OAA Math and Reading based on the attributed district, with Help File



2. District Value-Added Report for OAA Math and Reading based on the tested district, with Help File
3. District Diagnostic Report for OAA Math and Reading based on the attributed district, with Help File
4. District Diagnostic Report for OAA Math and Reading based on the tested district, with Help File
5. District Performance Diagnostic Report for OAA Math and Reading based on the attributed district, with Help File
6. District Performance Diagnostic Report for OAA Math and Reading based on the tested district, with Help File
7. District Value-Added Summary Report for OAA Math and Reading based on the attributed district, with Help File
8. District Value-Added Summary Report for OAA Math and Reading based on the tested district, with Help File
9. District Diagnostic Summary Report for OAA Math and Reading based on the attributed district, with Help File
10. District Diagnostic Summary Report for OAA Math and Reading based on the tested district, with Help File
11. District Performance Diagnostic Summary Report for OAA Math and Reading based on the attributed district, with Help File
12. District Performance Diagnostic Summary Report for OAA Math and Reading based on the tested district, with Help File
13. District Diagnostic Student List based on attributed district with Help File
14. District Diagnostic Student List based on tested district with Help File
15. District Performance Diagnostic Student List based on attributed district with Help File
16. District Performance Diagnostic Student List based on tested district with Help File
17. District 1-Yr. Single Grade Projection Summary with Help File. The projection summary will report probability groupings of less than 50%, 50 – 90%, greater than 90%, and undetermined.
18. District Value-Added Report for OAA Science, fifth and eighth grades, based on tested district, with Help file
19. District Diagnostic Report for OAA Science, fifth and eighth grades, based on the tested district, with Help File
20. District Performance Diagnostic Report for OAA Science, fifth and eighth grades, based on the tested district, with Help File
21. District Value-Added Summary Report for OAA Science, fifth and eighth grades, based on the tested district, with Help File
22. District Diagnostic Summary Report for OAA Science, fifth and eighth grades, based on the tested district, with Help File
23. District Performance Diagnostic Summary Report for OAA Science, fifth and eighth grades, based on the tested district, with Help File.

#### 4.2.2 School Reports

1. School Value-Added Report for OAA Math and Reading based on the attributed school, with Help File
2. School Value-Added Report for OAA Math and Reading based on the tested school, with Help File
3. School Diagnostic Report for OAA Math and Reading based on the attributed school, with Help File
4. School Diagnostic Report for OAA Math and Reading based on the tested school, with Help File
5. School Performance Diagnostic Report for OAA Math and Reading based on the attributed school, with Help File
6. School Performance Diagnostic Report for OAA Math and Reading based on the tested school, with Help File
7. School Diagnostic Student List for OAA Math and Reading based on attributed school with Help File
8. School Diagnostic Student List for OAA Math and Reading based on tested school with Help File
9. School Performance Diagnostic Student List for OAA Math and Reading based on attributed school with Help File
10. School Performance Diagnostic Student List for OAA Math and Reading based on tested school with Help File
11. School Search Demographic Summary with Help File
12. School 1-Yr. Single Grade Projection Summary with Help File. The projection summary will report probability groupings of less than 50%, 50 – 90%, greater than 90%, and undetermined.
13. School 1-Yr. All Grades Projection Summary with Help File. The projection summary will report probability groupings of less than 50%, 50 – 90%, greater than 90%, and undetermined.
14. School Value-Added Report for OAA Science, fifth and eighth grades, based on tested school, with Help file
15. School Diagnostic Report for OAA Science, fifth and eighth grades, based on the tested school, with Help File
16. School Performance Diagnostic Report for OAA Science, fifth and eighth grades, based on the tested school, with Help File
17. For participating districts of the extended testing (this will be paid for by Battelle for Kids):
  - a. For participating districts that administered TerraNova in second grade, School Value-Added Report for third grade OAA Math and Reading and TerraNova Science and Social Studies based on the tested school, with Help File
  - b. For participating districts that administered TerraNova in second grade, School Diagnostic Report for third grade OAA Math and Reading and TerraNova Science and Social Studies based on the tested school, with Help File
  - c. For participating districts that administered TerraNova in second grade, School Performance Diagnostic Report for third grade OAA Math and Reading based on the tested school, with Help File

- d. For participating districts that administered TerraNova Science and Social Studies in grades 3-8, School Value-Added Report for 4<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade TerraNova Science and 4<sup>th</sup>-8<sup>th</sup> grade TerraNova Social Studies based on tested school, with Help file
  - e. For participating districts that administered TerraNova Science and Social Studies in grades 3-8, School Diagnostic Report for 4<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade TerraNova Science and 4<sup>th</sup>-8<sup>th</sup> grade TerraNova Social Studies based on tested school, with Help file
  - f. For participating districts that administered ACT End of Course tests, School Value-Added Report based on tested school, with Help file.
  - g. For participating districts that administered ACT End of Course tests, School Diagnostic Report based on tested school, with Help file.
  - h. For participating districts, School Value-Added Report for OGT subjects based on tested school, with Help File.
  - i. For participating districts, School Diagnostic Report for OGT subjects based on tested school, with Help File.
  - j. For participating districts, School Performance Diagnostic Report for OGT subjects based on tested school, with Help File.
18. Beginning in 2013, given adequate data, for participating districts of the Mini-Grant (this will be paid for by Battelle for Kids):
- a. School Value-Added Report for third grade OAA Math and Reading using second grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - b. School Diagnostic Report for third grade OAA Math and Reading using second grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - c. School Value-Added Report for third grade OAA Math and Reading using second grade fall and spring STAR Math and Reading as predictors based on the tested school, with Help File.
  - d. School Diagnostic Report for third grade OAA Math and Reading using second grade fall and spring STAR Math and Reading as predictors based on the tested school, with Help File.
  - e. School Value-Added Report for third grade MAP Science using second grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - f. School Diagnostic Report for third grade MAP Science using second grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - g. School Value-Added Report for second grade MAP Math and Reading using first grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - h. School Diagnostic Report for second grade MAP Math and Reading using first grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - i. School Value-Added Report for second grade STAR Math and Reading using first grade fall and spring STAR Math and Reading as predictors based on the tested school, with Help File.
  - j. School Diagnostic Report for second grade STAR Math and Reading using first grade fall and spring STAR Math and Reading as predictors based on the tested school, with Help File.

#### 4.2.3 ACT End of Course projections for participating districts

This will be paid for by Battelle for Kids.

1. Projections to the ACT End of Course subjects will be done for the participating districts.

#### 4.2.4 Student Reports

1. Custom Student Reports with Help File
2. Individual Student Reports with Help File
3. Individual Student Projection Reports with Help File, including projections to the next grade.
4. Beginning in 2013, new demographics will be added on the web for students who are gifted in math, gifted in reading, superior cognitive, or in the subgroup analysis for the lowest quintile for achievement.

#### 4.2.5 Other Reports

1. Student Pattern Report with Help File
2. Feeder Pattern Report with Help File

#### 4.2.6 Usage Reports

1. IRN will be listed in a separate field from LEA name in the usage reports.
2. Select state users will be granted access to the usage reports.

### 4.3 Teacher-Level Analyses

Classroom analyses require instructors to have a unique identifier that follows the instructor across years, schools, and districts. This identifier should not be re-assigned to another teacher in the state's analyses. A system that allows students' scores to be linked to their teachers would include the unique identification of teachers as well as the unique identification of the student taught. To deliver the teacher reporting through the Web delivery, the unique teacher identifier is connected with the teacher's email address so that teachers can access their reports from the SAS EVAAS site.

Classroom-level analyses require a potential user such as the Ohio Department of Education to develop business rules specific to the analyses themselves. Students are excluded from the teacher-level analysis if they have more absences than an amount prescribed by law. ODE will provide SAS with a file that flags students who would be excluded based on that legislative action. All other students are included in the teacher-level analysis as long as the student is linked to the individual teacher by the student-teacher linkage file that is received every year, and the student has a valid test score in that subject and grade.

The delivery of the teacher linkage files to SAS EVAAS is to be early on the day of July 31, 2013.

The statistical methodology for teacher modeling is documented at <http://www.sas.com/resources/asset/SAS-EVAAS-Statistical-Models.pdf>.

#### Teacher Reports

1. Teacher Value-Added Report for OAA Math and Reading with Help File
2. Teacher Diagnostic Report for OAA Math and Reading with Help File
3. Teacher Student Pattern Report for OAA Math and Reading with Help File

4. For participating districts of the extended testing:
  - a. For participating districts that administered TerraNova in second grade, Teacher Value-Added Report for third grade OAA Math and Reading and TerraNova Science and Social Studies with Help File
  - b. For participating districts that administered TerraNova in second grade, Teacher Diagnostic Report for third grade OAA Math and Reading and TerraNova Science and Social Studies with Help File
  - c. For participating districts that administered TerraNova Science and Social Studies in grades three-eight, Teacher Value-Added Report for for 4<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade TerraNova Science and 4<sup>th</sup>-8<sup>th</sup> grade TerraNova Social Studies with Help file
  - d. For participating districts that administered TerraNova Science and Social Studies in grades three-eight, Teacher Diagnostic Report for for 4<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grade TerraNova Science and 4<sup>th</sup>-8<sup>th</sup> grade TerraNova Social Studies with Help file
  - e. For participating districts that administered ACT EOC tests, Teacher Value-Added Report for ACT EOC subjects with Help File
  - f. For participating districts that administered ACT EOC tests, Teacher Diagnostic Report for ACT EOC subjects with Help File
5. Beginning in 2013, given adequate data, for participating districts of the Mini-Grant:
  - a. Teacher Value-Added Report for third grade OAA Math and Reading using second grade fall and spring MAP Math and Reading as predictors, with Help File.
  - b. Teacher Diagnostic Report for third grade OAA Math and Reading using second grade fall and spring MAP Math and Reading as predictors, with Help File.
  - c. Teacher Value-Added Report for third grade OAA Math and Reading using second grade fall and spring STAR Math and Reading as predictors based on the tested school, with Help File.
  - d. Teacher Diagnostic Report for third grade OAA Math and Reading using second grade fall and spring STAR Math and Reading as predictors, with Help File.
  - e. Teacher Value-Added Report for third grade MAP Science using second grade fall and spring MAP Math and Reading as predictors, with Help File.
  - f. Teacher Diagnostic Report for third grade MAP Science using second grade fall and spring MAP Math and Reading as predictors, with Help File.
  - g. Teacher Value-Added Report for second grade MAP Math and Reading using first grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - h. Teacher Diagnostic Report for second grade MAP Math and Reading using first grade fall and spring MAP Math and Reading as predictors based on the tested school, with Help File.
  - i. Teacher Value-Added Report for second grade STAR Math and Reading using first grade fall and spring STAR Math and Reading as predictors based on the tested school, with Help File.
  - j. Teacher Diagnostic Report for second grade STAR Math and Reading using first grade fall and spring STAR Math and Reading as predictors, with Help File.

6. Beginning in 2013, a list of teachers who linked but do not have a report for a test/subject/grade in the current year and categorical reasons for missing reports. This report is viewable at the school administrator level.

All teacher reports will have the ability to view the students actually linked to a teacher and ultimately used in part of the calculation for teacher value-added measures. Drill-down features to student-level data are made available on the value-added report, teacher diagnostic and student pattern reports.

#### **4.4 Export Function**

SAS EVAAS will provide the capability to export value-added data and student-level projection data to select accounts with designated access. The user will be able to select a file type as well as the entities to be included in the file that is available for download. All ODE account administrators at the district and school levels are given the ability to export data as well as to designate which additional users will have the ability to export data.

It is important to recognize that proper security measures must be taken when designating who has access to this Web functionality.

#### **4.5 Batch Printing**

At the student level, SAS EVAAS will provide the capability to print all the reports pertaining to an individual student with a single click. These reports include the student history information as well as the student projection data. Another capability is printing a set of individual student reports based on a student search, custom student report, or any other student list format (such as a list from a diagnostic report or a projection summary).

## 5 Account Creation and Maintenance

### 5.1 District Admin Account Updates for 2013

When the 2013 reporting is released, SAS EVAAS will provide an automated account update for district admin accounts. To perform this service, SAS EVAAS needs a spreadsheet from the Ohio Department of Education with the following information for each District Administrator that needs to be updated:

- Title (Mr., Mrs., Ms., Dr.)
- First Name
- Last Name
- Email Address
- District Name
- District IRN

This file should be received at SAS EVAAS by August 16, 2013 to ensure timely account maintenance. To perform these updates SAS EVAAS will follow the same verification procedure that was used in 2012.

### 5.2 Community School Accounts

Many community schools appear in the Ohio Value-Added Reporting as their own district. To ensure appropriate levels of access for the sponsors, superintendents, and principals of these schools, the accounts will be created within the following structure:

- Sponsors will have State User accounts with access to selected schools. These accounts will not have access to student-level reporting. These accounts will be managed by the state administrator. Sponsors associated with multiple schools will be able to access all of their schools with a single account.
- Superintendents will have District Administrator accounts. These accounts include access to school-level and student-level reporting for the superintendent's own school. With these accounts, they will be able to create and maintain accounts for principals and other users at their own school. The district administrator will have the option of granting access to student-level reporting for the user accounts he/she creates.
- Principals will have School Administrator accounts. These accounts include access to school-level and student-level reporting for the principal's own school. With these accounts, the principals will be able to create and maintain accounts for other users at their own school. The principal will have the option of granting access to school reporting only, student reporting only, or both for the user accounts he/she creates.

When responding to requests for access to community school reporting, SAS EVAAS will adhere to the following process:

- Requests from sponsors and superintendents will be referred to Marianne Mottley at the Ohio Department of Education.
- Requests from principals will be referred to the appropriate superintendent.
- Requests from teachers and others who identify themselves as being associated with a specific community school will be referred to the appropriate superintendent.

### 5.3 Continuing Account Maintenance

The State Administrator account, assigned to Marianne Mottley or her designee, has the authority to create new District Administrator and State User accounts and to modify existing accounts. This process applies to both school district administrators and community school administrators who have District Administrator accounts as well as other state-level staff.

#### To modify an existing District Admin account

1. Login as the State Administrator.
2. Click the Admin link at the top of the screen. By default you will see a list of Districts and the associated Admin account.
3. Click on the name of the district you would like to modify.
4. Choose one of the following selections:
  - a. Deactivate Admin Account
  - b. Send Account Info
  - c. Move Admin
5. You will be guided through the process for the action you've selected.

#### To create a new District Admin account

1. Login as the State Administrator.
2. Select the Admin link at the top of the screen.
3. Click on the name of the district for which you would like to add an administrator
4. Select Add an admin
5. Enter the user's name and email address, and click Next.
6. Verify the user's information. If the Send new account info box is checked, the user will automatically receive an email with login instructions. If everything is correct, click Create Admin.

Appendix C on page 25 provides detailed information about account management.



## Appendix A: Calculation of NCE Scores

1. Calculate the percentile rank corresponding to each scaled score in the reference distribution. The reference distribution is the distribution of scale scores in the baseline year (typically the first year the test was given statewide) for each grade and subject combination. The percentile rank corresponding to a particular score, X, is calculated as

$$PR(X) = 100 (N_{\text{below-X}} + 0.5 N_{\text{equal-X}}) / N_{\text{total}} = \text{CumulativePercentX} - 0.5 \text{PercentX}, \text{ where}$$

$PR(X)$  is the percentile rank of score X,

$N_{\text{total}}$  is the number of students in the reference population,

$N_{\text{below-X}}$  is the number of students in the reference population with scores below X,

$N_{\text{equal-X}}$  is the number of students in the reference population with scores equal to X,

$\text{CumulativePercentX}$  is the cumulative percent of the population with scores below or equal to X,

$\text{PercentX}$  is the percent of the population with score X (e.g., from `PROC FREQ`).

2. Calculate the NCE corresponding to the percentile rank,  $PR(X)$ . Determine the corresponding ("equivalent") value, Z, from a standard normal distribution. For example, if  $PR(X)=.025$ , then

$$Z = -1.96.$$

The corresponding NCE score is calculated as

$$NCE = 50 + 21.0630579 * Z$$

In this example, the NCE corresponding to  $PR(X)=.025$  is  $50+21.0630579*-1.96 = 8.72$ .

## Appendix B: Sample Value-Added Reports

Figure 1: Sample Value-Added Gains and Means Report: 2005-2006

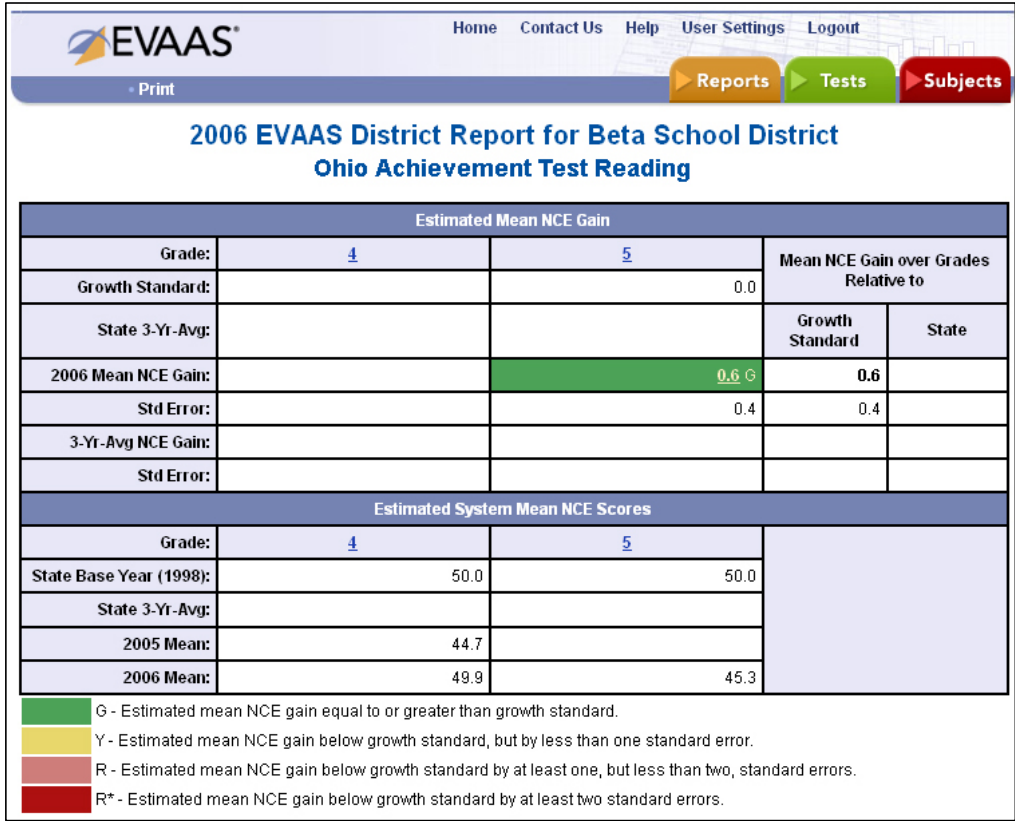
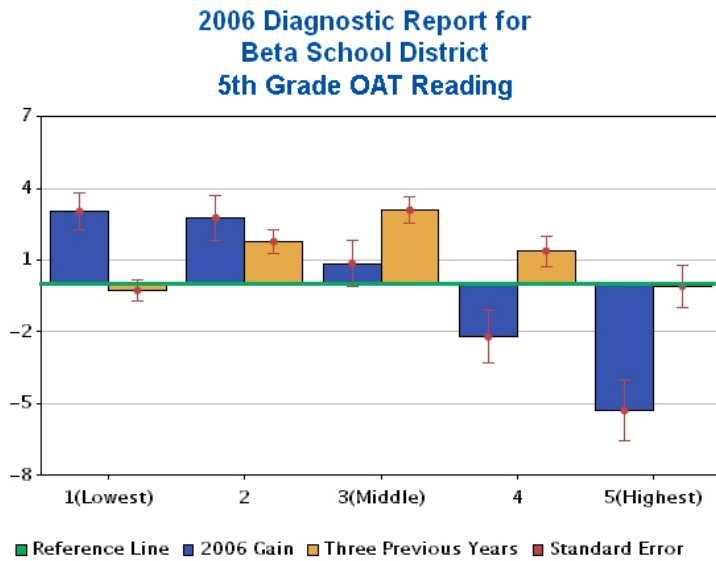
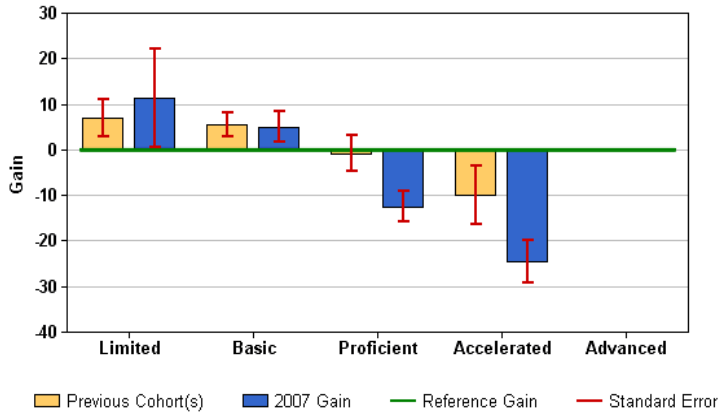


Figure 2: Sample Value-added Diagnostic Report: 2005-2006



		Prior-Achievement Subgroups					
		1 (Lowest)	2	3 (Middle)	4	5 (Highest)	
Math	Reference Line	0.0	0.0	0.0	0.0	0.0	
	2006	Gain	3.0	2.8	0.9	-2.2	-5.3
		Std Err	0.8	0.9	1.0	1.1	1.3
		Nr of Students	341	257	224	204	214
	Three Previous Years	Gain	-0.3	1.8	3.1	1.4	-0.1
		Std Err	0.4	0.5	0.5	0.6	0.9
		Nr of Students	967	651	577	516	484

Figure 3: Sample Value-added Performance Diagnostic Report: 2005-2006



		Predicted Proficiency Group					
		Limited	Basic	Proficient	Accelerated	Advanced	
Mathematics	Reference Line		0.0	0.0	0.0	0.0	0.0
	2007	Gain	11.4	5.0	-12.5	-24.6	
		Std Err	10.8	3.3	3.3	4.6	
		No. of Students	5	14	35	9	2
		% of Students	7.7	21.5	53.8	13.8	3.1
	Previous Cohort(s)	Gain	7.0	5.5	-0.8	-10.0	
		Std Err	4.1	2.6	3.9	6.5	
		No. of Students	7	17	18	10	1
		% of Students	0.0	0.0	0.0	0.0	0.0

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Figure 4: Sample Value-added Summary Report: 2006-2007

School Name	Year	3	4	5	6	7	8
<a href="#">Leslie Middle School</a>	2004	N/A	N/A				
<a href="#">Marco High School</a>	2004	N/A	N/A				
<a href="#">Michael Middle School</a>	2004	N/A	N/A				
<a href="#">Nadine Middle School</a>	2004	N/A	N/A				
<a href="#">Oscar Middle School</a>	2004	N/A	N/A				
<a href="#">Otto Elementary School</a>	2004	N/A					
<a href="#">Paula Elementary School</a>	2004	N/A					
<a href="#">Richard Elementary School</a>	2004	N/A					
<a href="#">Shary Elementary School</a>	2004	N/A					
<a href="#">Tomas Elementary School</a>	2004	N/A					

- Estimated mean gain equal to or greater than growth standard
- Estimated mean gain below growth standard, but by less than one standard error
- Estimated mean gain below growth standard by at least one, but less than two, standard errors
- Estimated mean gain below growth standard by at least two standard errors
- N/A The school does not have data for this test and subject in the most recent year

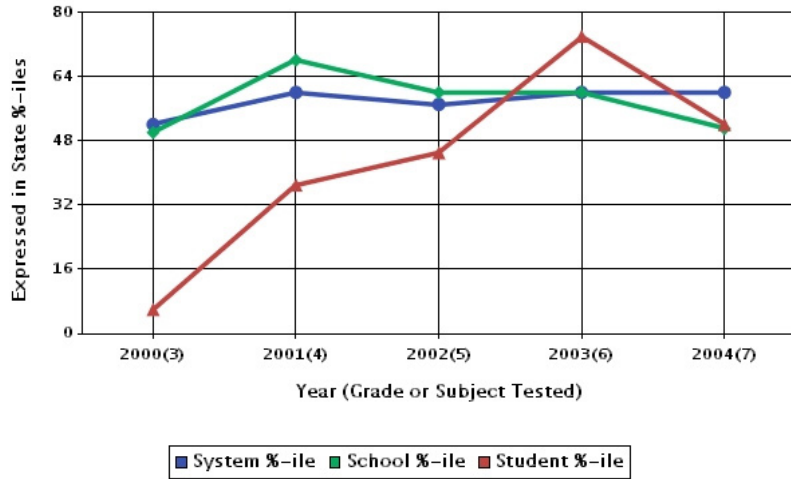
Figure 5: Sample Value-added Diagnostic Summary Report: 2006-2007

School Name	Prior-Achievement Subgroups				
	1 (Lowest)	2	3 (Middle)	4	5 (Highest)
Sort by	Prev 2007	Prev 2007	Prev 2007	Prev 2007	Prev 2007
Reference Line	0.0	0.0	0.0	0.0	0.0
<b>Beta Elementary School</b>					
2007 Gain	-7.3 (12)	0.5 (15)	-5.0 (11)	-9.0 (19)	-17.2 (9)
Previous Cohort(s)	0.9 (7)	3.8 (13)	4.7 (15)	-2.1 (10)	1.5 (6)
<b>Chrysalis Elementary School</b>					
2007 Gain	-1.9 (5)	1.9 (13)	-3.6 (13)	-6.0 (11)	0.6 (7)
Previous Cohort(s)	-6.8 (6)	-2.6 (8)	1.2 (16)	-0.5 (10)	4.5 (9)
<b>Epsilon Elementary School</b>					
2007 Gain	-3.2 (17)	-1.1 (17)	-0.0 (7)	(1)	(2)
Previous Cohort(s)	4.4 (26)	0.9 (14)	-1.4 (5)	(3)	(0)
<b>Eta Elementary School</b>					
2007 Gain	-3.4 (14)	-2.2 (16)	4.5 (7)	(1)	(1)
Previous Cohort(s)	3.4 (18)	0.2 (10)	5.6 (7)	(3)	(2)
<b>Gamma Elementary School</b>					
2007 Gain	6.2 (5)	1.9 (7)	4.8 (13)	3.7 (16)	-1.2 (27)
Previous Cohort(s)	(3)	2.5 (5)	-1.7 (14)	1.7 (24)	0.7 (18)

Figure 6: Sample Value-added Performance Diagnostic Summary Report: 2006-2007

School Name	Predicted Proficiency Group				
	Limited	Basic	Proficient	Accelerated	Advanced
Sort by	Prev 2007	Prev 2007	Prev 2007	Prev 2007	Prev 2007
Reference Line	0.0	0.0	0.0	0.0	0.0
<b>Beta Elementary School</b>					
2007 Gain	-4.8 (9)	5.5 (10)	-8.2 (40)	-22.7 (5)	(2)
Previous Cohort(s)	9.1 (5)	6.4 (5)	1.3 (35)	-1.5 (6)	(0)
<b>Chrysalis Elementary School</b>					
2007 Gain	(3)	2.9 (7)	-2.6 (33)	(4)	(1)
Previous Cohort(s)	(2)	-8.4 (5)	0.8 (33)	1.0 (9)	(0)
<b>Epsilon Elementary School</b>					
2007 Gain	-3.6 (11)	-1.4 (19)	-0.9 (13)	(1)	(0)
Previous Cohort(s)	8.3 (14)	-0.5 (17)	1.1 (17)	(0)	(0)
<b>Eta Elementary School</b>					
2007 Gain	-0.9 (9)	-0.3 (16)	-3.1 (13)	(1)	(0)
Previous Cohort(s)	3.1 (12)	3.4 (11)	2.6 (16)	(1)	(0)
<b>Gamma Elementary School</b>					
2007 Gain	(3)	(3)	5.5 (35)	0.2 (17)	-9.6 (10)
Previous Cohort(s)	(1)	(4)	0.6 (39)	0.1 (18)	(2)

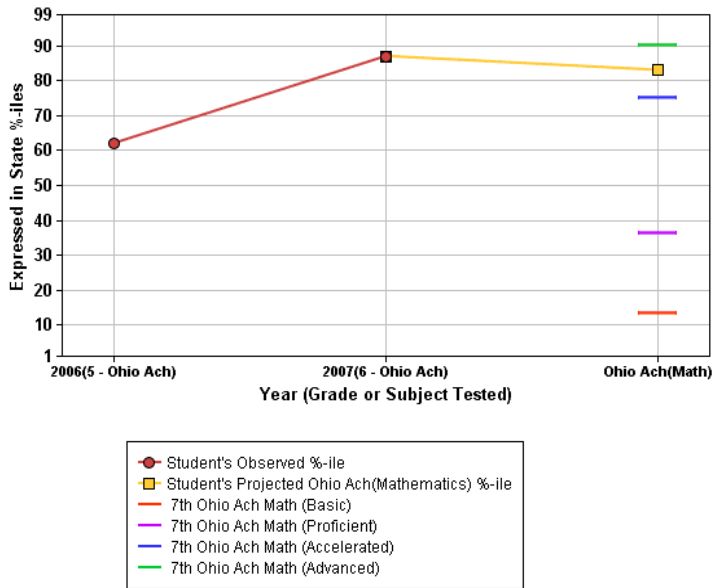
Figure 7: Sample Student Report



Comment [jilean1]: Is this from the OH demo site? It has "system" rather than "district" for the blue line.

Subject: Math					
Year (Grade or Subject Tested)					
Ohio Achievement Test (Math)					
	2000(3)	2001(4)	2002(5)	2003(6)	2004(7)
State NCE \ Score	18	43	47	64	51
%-ile	6	37	45	74	52

Figure 8: Sample Student Profile with Projections



Projection: 7th Ohio Ach Math				
Projected State Percentile	Probability of Success			
	Basic	Proficient	Accelerated	Advanced
83	100.0%	99.8%	72.0%	22.5%

Student's Testing History		
	Year (Grade or Subject Tested)	
	Ohio Ach (Mathematics)	
	2006(5)	2007(6)
Score	56	74
%-ile	62	87



Figure 9: Sample Value-added Diagnostic Report Help File

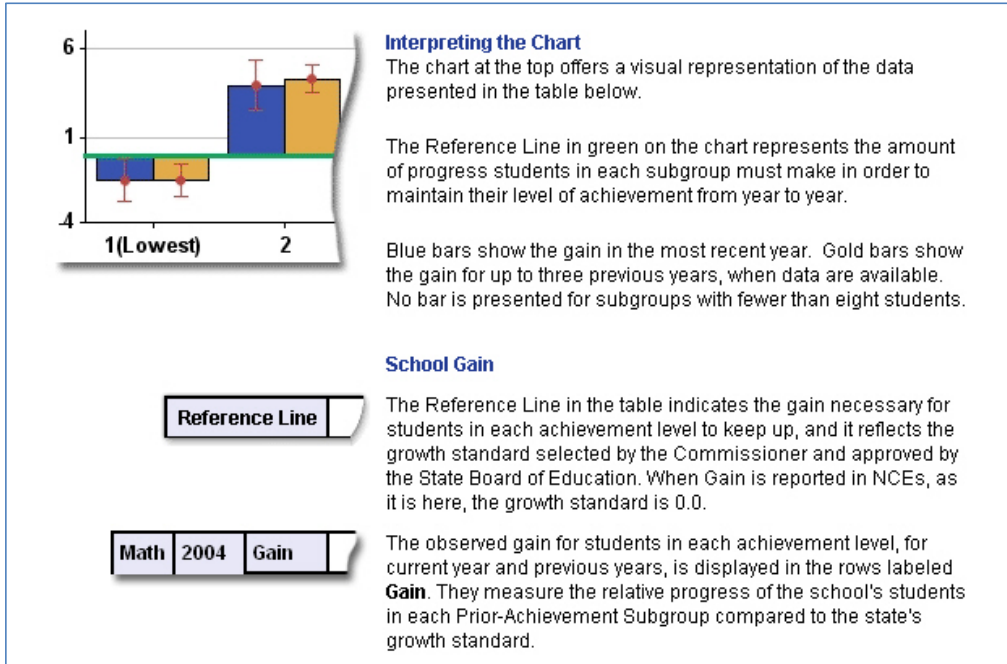


Figure 10: Sample Student Report Help File




## Help

### Interpreting the Student Report

**Graph**  
 The graph provides a picture of the student's history in the subject selected. The year and grade in which the test was administered appear below the graph. To see the graph for another subject, click on Subjects and choose from the subjects listed.

- ◆ **Blue dot:** Mean percentile for the system, expressed in state percentiles for the year tested. Thus, the 50th percentile represents the state mean for that year. If the system mean is not visible on the graph, then the system and school percentiles are identical.
- ◆ **Green Diamond:** Mean percentile for the school, expressed in state percentiles.
- ▲ **Red triangle:** Student's state percentile in the years tested.

**Graph Interpretation**  
 The state average in any year is at the 50th percentile. The achievement of systems, schools, and students that fall below the 50th percentile is less than the state average. When interpreting the graph, compare the student's line to the system and school lines for the same grade.

- 
  - **Parallel lines:** Student's progress is similar to the average student
- 
  - **Student line slants upward more sharply:** Student progressed at a faster pace than the average student
- 
  - **Student line slants upward less sharply or downward:** Student progressed at a slower rate than the average student

**Table**

Subject: Math					
	Year (Grade or Subject Tested)				
	TCAP CRT (Math)				
	2001(3)	2002(4)	2003(5)	2004(6)	2005(7)
State NCE / Score	79	78	99	85	73
%-ile	92	91	99	95	86
Perf Level					AD

The table shows the academic history for a student for all grades tested in the chosen subject. The year of the test refers to the school year to which the test was attributed. For example, tests administered in the summer and fall of 2004 will be labeled 2005 because they are attributed to the 2004-2005 school year.

The student's state NCE score, basis 1998, and state percentile for the tested year are provided for each grade tested. The performance level is shown below the state percentile, beginning in 2005:

## Appendix C: Account Management

The State Administrator can use the SAS EVAAS admin tool to create and maintain accounts for District Administrators and State Users. The State Administrator can also view dynamic usage reports, and use the email tool to send emails to groups of Users.

### District Administrator Accounts

District Admins are responsible for creating accounts and managing access to the SAS EVAAS reporting for all district-level personnel and for one School Admin per school. A district can have only one District Admin at a time.

#### Creating a District Admin Account

You can create District Admin accounts for districts that don't have admins from the All Districts and the Districts Without Admins lists. Click on either of these links to start the process. Then,

1. Click anywhere on the row of a District that does not have an Admin.
2. Click *Add an Admin*.
3. Supply the name and email address of the Admin.
4. The box to send email to the Admin is checked, by default. The email will contain logon information, username, and a temporary password. If you don't want to send this information, uncheck the box.
5. Click *Create Admin*.

Alternatively, you can change an active or deactivated State User to a District Admin or vice versa, move an active District Admin to another district, or reactivate a District Admin who has been deactivated, regardless of whether the district currently has an active Admin or not. The next section on replacing District Admins explains how to do this.

#### Deactivating and Reactivating a District Admin

To **deactivate** a District Admin, click on the Admin's name and choose *Deactivate Admin Account* from the District Maintenance Options. By default, an email will be sent to the account being deactivated. Uncheck the box if you don't want to send the email. Click *Deactivate Admin* to complete the process.

To **reactivate** an Admin account, click *Contact Us* from the menu at the top of the page. Submit the name and **current email address** of the Admin you would like to reactivate, along with the following information:

- Should the Admin be reactivated as a State User or as a District Admin?
- If the Admin is reactivated as a District Admin, which district will s/he administer? (Reactivating the User as a District Admin for a district that already has an Admin will automatically deactivate the current Admin.)

Once the account has been reactivated, you can modify the account's access. See the help file section for modifying permissions for the type of account (State User or District Admin) you want to modify.

## State User Accounts

State Users may see any reports that the State Admin designates. Access is assigned on an individual basis, according to the function and need of the User. The State Admin may create as many State User accounts as needed.

### Creating a State User Account

You can create as many State User accounts as you want. You determine what each State User can access. Permissions can range from reports for a single school to all the reporting for the entire state. Click on the *State Users* tab and then *Create a New State User* to start the process.

1. Enter the new User's name and email address. Click *Assign Access*.
2. Set access permissions:
  - a. If you select the *Access to All Districts* box, other options will be grayed out. The User will have access to all reporting in the state.
  - b. If you don't select *Access to All Districts*, choose any districts or schools from the Available Access Box to which you'd like to allow access. Choices will appear in the Assigned Access Box.
    - i. Choosing from the *Districts* tab allows access to all schools in the chosen district.
    - ii. Choosing from the *Schools* tab allows you to limit access to only the schools you select, within a district.
      - (1) Click on the *Schools* tab and choose the district that contains the schools you want to assign. The list of the schools within the district appears.
      - (2) Select the schools to which you want to grant access.
  - c. You can remove access to any district or school by clicking on its name in the Assigned Access Box. It will reappear in the Available Access Box.
3. Select whether the User will have access to student records. Your choice will apply to all districts and schools the User can access.
4. When you are satisfied with your choices, click *Next* and review the entries you have made.
5. The box to send email to the User is checked, by default. The email will contain logon information, username, and a temporary password, as well as a list of what the User can access. If you don't want to send this information, uncheck the box.
6. Click *Create User*.

### Modifying an Existing State User's Permissions

Clicking on any active State User's name brings up a page that shows the User's name, email address, employee ID number (when available) and access permissions. You make changes to the account by using the Account Maintenance Options: *Modify Access*; and *Deactivate User Account*. You also have the option to *Send Account Information*, which includes logon information, username, and password, as well as a list of the districts and schools to which the user has access.

### Modifying Access to Districts or Schools

1. Click on the name of the User you want to modify and choose *Modify Access* from the Account Maintenance options.

2. You have the option to allow the User to access the reporting for all districts and schools. Click the *Access to All Districts* box if this is your intention. The User will have access to all reporting in the state.
3. If you don't select *Access to All Districts*, choose any districts and schools you want to allow the User to access from the Available Access Box. Choices will appear in the Assigned Access Box.
  - a. Choosing from the *Districts* tab allows access to all schools in the chosen district.
  - b. Choosing from the *Schools* tab allows you to limit access to only the schools you select, within a district.
    - i. Click on the *Schools* tab and choose the district that contains the schools you want to assign. The list of the schools within the district appears.
    - ii. Select the schools to which you want to grant access
4. You can remove access to any district or school by clicking on its name in the Assigned Access Box. It will reappear in the Available Access Box.
5. Select whether the User will have access to student records. Your choice will apply to all districts and schools the User can access
6. When you are satisfied with your choices, click *Next* and review the entries you have made.
7. The box to send email to the User is checked, by default. The email will contain logon information, username, password, and access information. If you don't want to send it, uncheck the box.
8. Click *Submit Changes* to modify the account.

### Removing Access to Districts and Schools

1. Click on the name of the User you want to modify and click *Modify Access*.
2. You can remove access to any district or school by clicking on its name in the Assigned Access Box. It will reappear in the Available Access Box.
3. You can also remove the User's access to student records. When you have made the desired changes, click *Next*.
4. You have the option to send a notification detailing the modifications you've made. Uncheck the box to Send Email, if you don't want to send the notification.
5. Click *Submit Changes* to modify the account.

### Deactivating and Reactivating a State User Account

To **deactivate** a State User, click on the User's name and choose *Deactivate Account* from the Account Maintenance Options.

To **reactivate** a User, click *Contact Us* from the menu at the top of the page. Submit the name and **current email address** of the User you would like to reactivate, along with the following information:

- Should the User be reactivated as a State User or as a District Admin?
- If the User is reactivated as a District Admin, which district will s/he administer? (Reactivating the User as a District Admin for a district that already has an Admin will automatically deactivate the current Admin.)

Once the account has been reactivated, you can modify the account's access. See the help file section for modifying permissions for the type of account (State User or District Admin) you want to modify.

## Accessing Usage Reports

Usage Reports are available to Administrators at the State, District, and School levels. The State Admin can see usage reports for all accounts in the state. District Admins can see Usage Reports for all accounts within their district, but State-level Usage Reports will not be accessible. School Admins can see Usage Reports for all accounts within their school but will not see reports for usage at the District or State levels.

## Creating a Usage Report

By default, you will see the Usage Report for the most recent two weeks and two days.

1. Click Select Parameters.
2. Choose the dates for inclusion in your report.
3. Choose the report type.
  - a. If you are making a Summary Usage Report, it will default to display daily, monthly, or yearly usage, depending upon the time span you've chosen. Example:

Time span selected is August 15, 2009 to June 15, 2010. The Summary Report will show monthly usage for August (August 15 - 31), each month between August and June, and for June (June 1 - 15).
  - b. Choosing Yearly Comparison shows the usage during the time span you've chosen for each year since 2002. If your time span includes dates in two years, the usage will be associated with the year that begins within the time span. Example:

Time span selected is August 15, 2009 to June 15, 2010. The Yearly Comparison Usage Report will show the usage for August 15 through June 15 for every year since 2002. The usage for August 15, 2009 through June 15, 2010 will be associated with 2010.
4. You may choose to reveal or to hide users with no logins during the specified time span. The default is to hide users who have not logged in.
5. Click **Submit**.

## Navigating the Usage Reports

For all Usage Reports:

- Total logins for each user for the entire time span are shown in the rightmost column.
- Total logins for each day, month or year for all users are shown in the bottom row.
- Total logins for all users for the entire time span are shown in the rightmost column of the bottom row.
- For State, District, or School Users and Admins, click on the User's or Admin's name to see specific times and dates of logins.

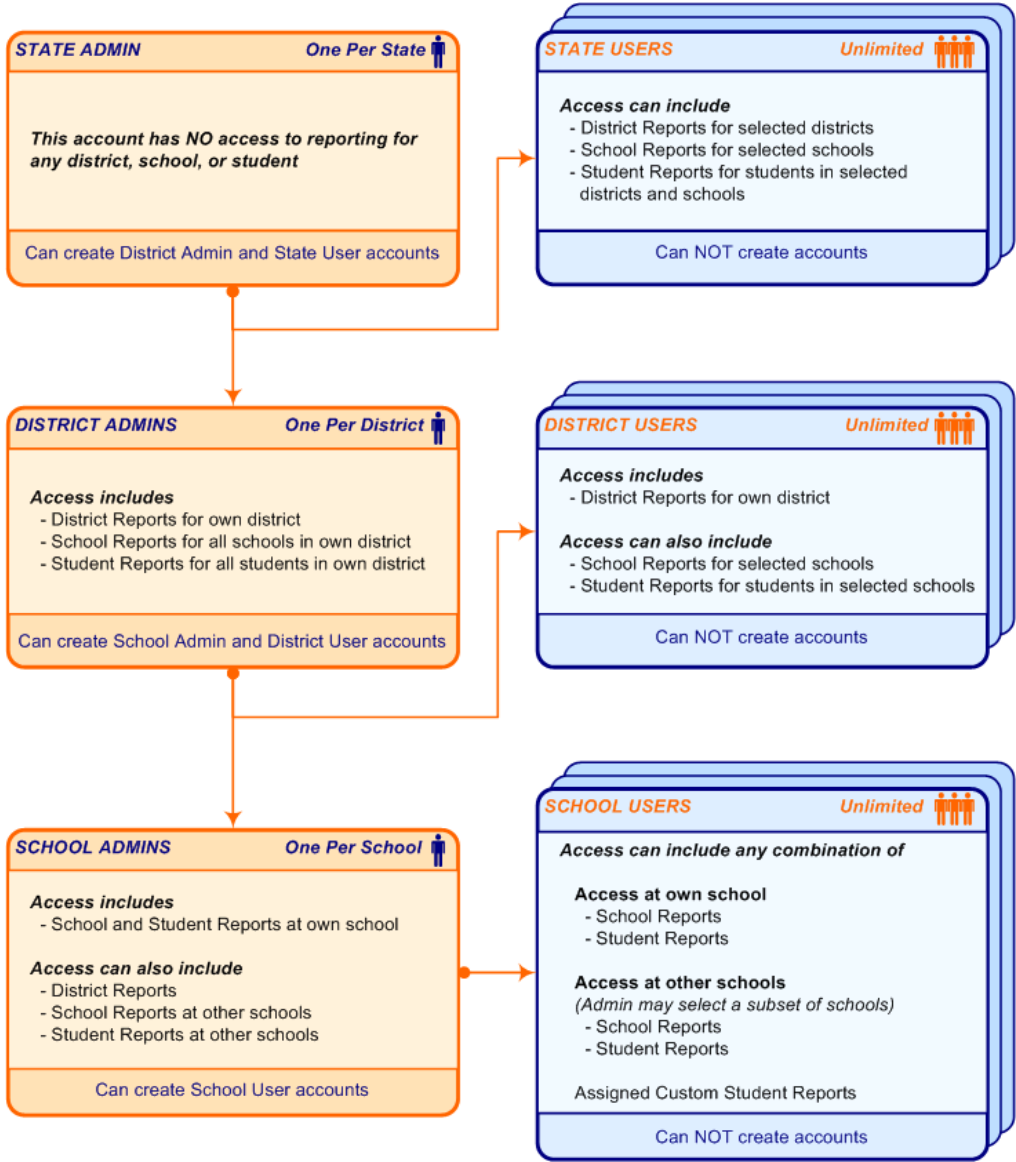
**Navigation:** If you want to return to a level above the one you are viewing, notice that there is a link to each level below the date range for your report. Click on any level to return to the report for those accounts.

### Viewing Usage Statistics for a Specific Account

The State Admin can see the usage statistics for all users by drilling down through the choices on the table below the Usage Graph. **Note: Click "Select Parameters" and choose to show Users with zero logins if you want to view all accounts as you drill to different levels.**

1. **Usage Reports for State Administrators and State Users:** The link to access the Usage Reports for State Administrators and Users is at the top of the list. Click on the link to see the list of accounts and the number of times they have logged in within the time span you have chosen. Only the names of Users who have logged in at least once will appear in the list unless you choose to reveal accounts with zero logins.
2. **Usage Reports for Districts:** The list includes logins for each district for the specified time span.
3. **Usage Reports for District Admins, District Users, and Schools:** To view logins for District Admins, District Users, and schools within districts, click on a district's name in the list.
  - a. The link to access the Usage Reports for District Administrators and Users is at the top of the list. Click on the link to see the list of accounts and the number of times each has logged in within the time span you have chosen.
  - b. The list includes logins by each school within the district during the chosen time span. Click on the name of the school to see Usage Reports for the school's Admin and Users.
4. **Usage Reports for School Admins and Users:** To view logins for School Admins and Users within a school, click on a school's name to see the list of accounts and the number of times each has logged in within the time span you have chosen. Click on a name to see how often and what time of day a User has accessed his or her account.

### Available Account Types





## Appendix D: Ohio Scale Stabilization Process

At the request of ODE, SAS EVAAS evaluated the stability of the OAA test scaling and assessed methods to stabilize the scales. The link below opens a white paper that describes the evaluation and methods to stabilize the scales. Approved by ODE in the contract modifications for 2010, SAS EVAAS implemented the scale stabilization for the 2009-2010 school value-added analysis and will continue to implement the scale stabilization methods for future years' test data. The baseline year for the stabilization is 2010 as specified by ODE in July 2010.

<http://www.ode.state.oh.us/GD/DocumentManagement/DocumentDownload.aspx?DocumentID=86086>



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