

STATE OF OHIO  
DEPARTMENT OF ADMINISTRATIVE SERVICES  
GENERAL SERVICES DIVISION  
OFFICE OF PROCUREMENT SERVICES  
4200 SURFACE ROAD, COLUMBUS, OH 43228-1395

AMENDMENT FOR CHANGE  
AMENDMENT NO. 5

TO: OHIO DEPARTMENT OF EDUCATION  
FROM: ROBERT BLAIR, DIRECTOR, DEPARTMENT OF ADMINISTRATIVE SERVICES  
SUBJECT: CONTRACT FOR VALUE-ADDED ANALYSIS AND REPORTING

Attached are pages 3 through 7 to this contract. Remove these pages from the existing contract and replace with the attached pages on the effective and/or revision date.

This amendment is issued to add the process and cost of updating Value-Added analyses with appeals data. Pages 5 and 6 were re-paginated and page 7 was added.

All other prices, terms and conditions remain unchanged.

Questions regarding this Amendment and/or the Requirements Contract may be directed to:

Therese Gallego, CPPB  
therese.gallego@das.ohio.gov

This Amendment, the main Requirements Contract and any additional amendments thereto are available from the DAS Web site at the following address:

<http://www.ohio.gov/procure>

Affected Contractor(s):

94684  
SAS Institute Inc.  
100 SAS Campus Drive  
Cary, NC 27513  
rob.lotterman@sas.com

The growth measure is a function of the difference between the predicted and observed scores for a group of students with the program. The growth measure represents how many scale score points a program's students scored above or below how they were expected to score, given their prior testing history. A growth index is then calculated by dividing the growth measure by its standard error in order to determine the significance of the growth measure. Similar to other schools in Ohio, the growth index can be placed into one of five "effectiveness" categories for context and educational significance.

A. Option 2.

This model would require two testing windows during the year such that students test when they start the program and again when they end the program or in the spring. This model would be similar to the multivariate response model (MRM) currently used for OAA math and reading in non-dropout recovery schools in the state. With this option, growth is measured through a gain-based approach using the two test scores within a given year.

The growth measure is the estimated change in achievement for a group of students with a program relative to the distribution of test takers for that subject. If a national test is used with vertical scales, then a positive change could indicate growth depending on the uncertainty around that estimate. This indicates whether students make any growth at all relative to the fixed vertical scale of growth.

To determine whether students made significant progress or significantly declined, a growth index is then calculated by dividing the growth measure by its standard error. In addition programs could be categorized according to the magnitude of their growth to identify the programs making the most growth, least growth, etc.

The transient nature of the student populations in the dropout recovery program should be considered within the context of this option, as it would complicate the gain calculation.

B. Option 3.

This model is very similar to the option listed above, with the distinction of using a normed expectation of growth. This model would define a test-based expectation of growth and compare students' performance against that expectation. Rather than an expectation that students make *any* growth at all, the expectation is defined by students making *enough* growth to meet the normed expectation based on the testing norms for the given national assessment. This option would require accurate grade information, as norms are based on each grade.

Again, using this approach, indices could be calculated to categorize schools relative to this expectation. In addition, schools could be separated based on the magnitude of growth they show.

C. Option 4 (stand-alone or add-on to above options)

Using all prior and current testing data for each student, this option would provide a student-level projection for individual students. The projection would provide a probability of success towards an important benchmark, such as proficiency on the OGT. The projections would be delivered through the existing EVAAS web application, and access would be customized by user.

The student-level projections would serve as a more reliable metric of students' entering achievement so that educators can target their instruction more effectively.

Testing Considerations

The precise testing requirements depend on the data available for students and the type of test. In short, key considerations would include the following:

If students do not have an enrolled grade, then a computer-adaptive test is preferred.

If students are compared to an expected amount of normed growth (see Option 3), then a norm is required.

3. \*Updating Value-Added Analyses with Appeals Data

At the request of the Ohio Department of Education (ODE), the Contractor shall update the state's value-added analysis based on updated data gained from the data appeals process. More specifically, the updated data includes changes to student-level attribution to accountable schools and districts for Ohio state assessments and modifications to student-teacher linkages for Ohio state assessments and extended testing. Following is a description of the process.

ODE will send SAS updated data, and the subsequent analysis is dependent upon ODE's delivery of modified data in a form mutually agreeable to the parties to adjust the existing longitudinal database. Once such data is received by SAS, SAS will perform the following:

- A. SAS will use the updated data to re-calculate the value-added measures for all schools, districts and teachers impacted for the school year as well as the three-year average measures.

\*Indicates change 03/12/15.

- B. \*Files containing the re-calculated value-added measures for state accountability and teacher reporting will be delivered to ODE in a form mutually agreeable to the parties.
- C. Web reporting for Ohio state assessment accountable schools and districts will be updated with the re-calculated value-added measures.
- D. Web reporting for Ohio state assessments and extended testing teachers will be updated with the re-calculated value-added measures.

It is important to note that the web application will update the value-added and multi-year trend metrics only for the schools that have students whose data were updated the appeals process. In other words, schools that did not have students whose data were updated in the appeals process will not have any changes to their value-added and multi-year trend metrics.

#### MUTUALLY AGREED-UPON CLARIFICATION TO TERMS AND CONDITIONS

##### 5.3.3 Ownership of Deliverables

Contractor shall use SAS software products ("Software") to provide EVAAS analyses and reporting, including but not limited to any web reporting and any specialized or customized report formats or data analyses, showing analyses of student achievement data for potential summative and formative use from test data ("Reports"). Contractor hereby grants the State a limited, nontransferable, nonexclusive, royalty-free license to (i) use any website established and maintained by Contractor, (ii) receive the benefits of the Software, via the Reports, used by Contractor to produce the Reports, and (iii) use any Reports delivered to the State pursuant to the Contract. The Reports, Contractor's time, and the licenses granted herein shall be the sole deliverables provided to the State hereunder. Nothing herein grants the State a license to access or use the Software.

Contractor shall retain exclusive ownership of the Software, any web site established by Contractor to deliver any Reports to the State, and the Reports, including any intellectual property rights embodied therein. The license granted with respect to any website established and maintained by Contractor shall terminate upon expiration of this Contract. The licenses granted by Contractor in connection with the right to receive the benefit of the Software, via the Reports, and the use of any Reports, are perpetual. Contractor retains ownership of all tools, methods, techniques, standards, and other development procedures, as well as generic and preexisting shells, subroutines, and similar material incorporated in any Deliverable.

\*Indicates change 03/12/15.

Value-Added Analysis and Reporting  
 CSP903214  
 UNSPSC CATEGORY CODE: 86000000  
 OAKS ITEM NUMBER: 25153

Deliverable	FY2014 07/01/13-6/30/14 Cost	FY2015 07/01/14-6/30/15 Cost	FY2016 07/01/15-6/30/16 Cost	FY2017 07/01/16-6/30/17 Cost
1. Accountability System Value-Added and Student Reports. 1A: Development Plan, Statistical Documentation, and Technical Report 1B: Scale stabilization, analytics, web reporting 1C: Diagnostic analytics and web reporting  Export Functionality on the Web Included  Cost per Student	<i>(Deliverable 1 costs not to exceed statutorily defined \$2.00 per student cost in FY 2014)</i>  \$2.00 for quantities less than 862,000; \$1.85 for quantities over 862,000.	<i>(Deliverable 1 costs not to exceed statutorily defined \$2.00 per student cost in FY 2015)</i>  \$2.00 for quantities less than 862,000; \$1.85 for quantities over 862,000.	<i>(Deliverable 1 costs not to exceed statutorily defined \$2.00 per student cost in FY 2016)</i>  \$2.00 for quantities less than 862,000; \$1.85 for quantities over 862,000.	<i>(Deliverable 1 costs not to exceed statutorily defined \$2.00 per student cost in FY 2017)</i>  \$2.00 for quantities less than 862,000; \$1.85 for quantities over 862,000.
Evaluation quantity	797,000	1,337,000	1,337,000	1,337,000
<b>Total</b> (Evaluation quantity x cost)	\$1,594,000.00	\$2,473,450.00	\$2,473,450.00	\$2,473,450.00
2. Research and Development (R&D) Per Diem Cost	\$1,875.00 (R&D per diem)			
3. Demonstration Site	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
4. Teacher Reports	<i>(Not to exceed \$564,432 in FY 2014)</i> \$ 564,432.00	\$ 1,042,860.00	\$1,042,860.00	\$1,042,860.00
Deliverable	FY2014 07/01/13-6/30/14 Cost	FY2015 07/01/14-6/30/15 Cost	FY2016 07/01/15-6/30/16 Cost	FY2017 07/01/16-6/30/17 Cost
5. Auditor's Findings Data Update	Up to four data updates with a maximum total of \$200,000		\$ 0.00	\$ 0.00
6. Dropout Recovery Measure		\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
*7. Receive appeals data from ODE for districts and schools; rerun the analysis for all accountability value-added models; and deliver results via Excel		Included	\$ 39,375.00	\$ 39,375.00
*8. Receive appeals data from BFK for extended testing districts and schools; rerun the analysis for all extended testing value-added models(including mini grant historical data updates); and deliver results via Excel		Included	\$ 31,875.00	\$ 31,875.00

\*Indicates change 03/12/15.

*9. Receive Ohio state assessment appeals data for teacher level analyses. This could include information from the school/district appeals that will be used alongside other teacher level appeals to rerun the Ohio state assessment value-added models. Results will be delivered via excel.		Included	\$ 30,000.00	\$ 30,000.00
*10. Receive extended testing appeals data for teacher level analyses. This could include information from extended testing value-added models (including the historical mini grant updates). Results will be delivered via excel.		Included	\$ 35,625.00	\$ 35,625.00
*11. Update the web reporting completely		Included	\$ 37,500.00	\$ 37,500.00
<b>*Total</b>	\$2,218,432.00 plus R&D and Auditor's Findings Data Update	\$3,576,310.00 plus R&D and Auditor's Findings Data Update	\$3,750,685.00 plus R&D	\$3,750,685.00 plus R&D

CONTRACTOR INDEX

CONTRACTOR AND TERMS:

94684  
 SAS Institute Inc.  
 100 SAS Campus Drive  
 Cary, NC 27513

BID CONTRACT NO.: CSP903214-1 (12/31/15)

TERMS: Net 30

CONTRACTOR'S CONTACT:

Rob Lotterman

Office: (212) 413-2548  
 Fax: (919) 677-8177  
 E-Mail: rob.lotterman@sas.com

\*Indicates change 03/12/15.

SUMMARY OF AMENDMENTS

Amendment Number	Effective Date	Description
5	03/12/15	To add the process and cost for updating Value-Added analyses with appeals data.
4	03/04/15	To change Contractor's Contact.
3	06/27/14	To add the Dropout Recovery Measure and re-paginate the document.
2	03/28/14	To clarify details for the Auditor's Findings Update.
1	03/18/14	To modify deliverables in response to the Auditor of State Report; to repaginate and, to add Summary of Amendments page.