

## > Fact Sheet



### What does SAS® EVAAS® for K-12 do?

EVAAS is an educational resource for educators and policymakers. It uses test scores from a variety of assessments and follows individual students over time to provide two kinds of school improvement tools: reflective value-added reports to assess the effectiveness of districts, schools and teachers; and proactive projection reports on individual students' future performance.

### Why is SAS® EVAAS® for K-12 important?

EVAAS provides insight and guidance to maximize all students' academic potential, regardless of their achievement level or background. Value-added measures reflect how much educators are accelerating student progress. Individual student trajectories facilitate customized, proactive planning for students' college and career readiness. With these tools, educators can provide more effective instruction to students, regardless of their achievement level.

### For whom is SAS® EVAAS® for K-12 designed?

Teachers, principals, administrators and policymakers can all use customized reporting in EVAAS to be more effective and responsive in meeting individual school and district-wide goals.

# SAS® EVAAS® for K-12

Reliably assess and predict student performance

With growing competition in the global economy, students need to be prepared for the future's high-performance careers. To support all students' postsecondary opportunities, EVAAS is based on the underlying belief that all students can learn and deserve to make appropriate academic progress each year, regardless of their prior achievement levels.

EVAAS provides accurate and comprehensive reporting at the state, district, school, classroom and student levels. This allows flexibility to respond to factors in varying education climates, such as testing changes, policy decisions, missing test data, and the mobility of teachers and students.

As school districts strive for continuous improvement with limited resources, administrators need to develop their most valuable human capital investment – teachers. With shrinking budgets and growing class sizes, teachers are challenged to effectively differentiate instruction to ensure that high achievers are challenged, middle achievers are encouraged, and low achievers are supported with appropriate instructional strategies. Easily

understandable reporting gives teachers, guidance counselors, principals and other administrators the reliable information they need to have meaningful conversations regarding appropriate instructional strategies for each student.

After more than 20 years of development and practice, EVAAS is the most comprehensive reporting package of value-added metrics available in the educational market because it addresses all these challenges. Used in thousands of districts – statewide in Tennessee, Ohio, Pennsylvania and North Carolina – EVAAS assesses the influence of districts, schools and teachers on student progress rates and enables personalized educational planning at the student level. Through the breadth of reporting and interactive nature of web delivery, districts and schools can set their own policy goals and assess their success.

Educators are using EVAAS to:

- Differentiate instruction and provide early response to interventions.
- Differentiate professional development for educators based on their individual needs.

- Facilitate data-driven school improvement planning.
- Maximize scarce resources by evaluating the impact of programs on student growth.
- Inform human capital decisions such as teacher allocation, evaluation and award models.
- Identify and increase student enrollment in rigorous coursework.
- Increase the percentage of students who are proficient and college- or career-ready.
- Prevent dropouts and increase graduation rates through early identification of at-risk students.
- Facilitate data-driven parent-teacher conversations.
- Support policy changes and aid in state and federal accountability.

## Benefits

- **Include more students for more reliable progress estimates.** EVAAS accommodates student and teacher mobility by not excluding students with missing test scores from the analysis. By avoiding the bias that can occur from systematically excluding those students, this approach provides the most reliable estimate of effectiveness for a district, school or teacher.
- **Include more data for more precise progress estimates.** Multivariate longitudinal models ensure that educators are not held accountable based on a single test score. EVAAS uses up to five years of data for an individual student by simultaneously analyzing scores across all grades and subjects. This process minimizes the influence of measurement error associated with individual assessments and increases the precision of the estimates. Value-added models are continually refined to increase precision while reducing measurement error and bias.
- **Accommodate team teaching.** Teacher value-added reporting accommodates team teaching and other teaching arrangements, where more than one teacher has instructional responsibility for a student's learning.
- **Give policymakers flexibility in choosing assessments.** EVAAS can analyze tests that are on differing vertical or horizontal scales. This flexibility around scaling ensures continuity of reporting when tests change over time, giving policymakers more options in their testing. The criteria for inclusion in EVAAS analyses are: reliability, high correlation with curricular standards, and sufficient stretch in the reporting scale to measure the achievement of both very low- and very high-achieving students in a grade and subject. Any assessment meeting these criteria can be used in the modeling, including some interim or short-cycle assessments. The ability to refresh the EVAAS reporting multiple times within the school year gives educators the instructional tools needed to

formatively adjust their practices to best meet the needs of all students.

- **Gain the benefits of a SAS-hosted environment.** Because EVAAS is a hosted application, client partners do not need to make investments in hardware, software or staff. SAS manages sensitive data for a variety of global customers on secure servers with all of the required system backups in place to ensure the safety and privacy of sensitive data.
- **Advance knowledge through training.** EVAAS provides professional development specific to the needs of each education partner. The learning opportunities include interactive webinars that introduce users to the application and describe how to use the reporting to address real-world educational problems. In addition, interactive multimedia modules are embedded within the application to explain the reporting.

Online help guides users through interpreting and applying the reports, and provides instant answers to many common questions. Plus, access to the EVAAS educator support team is available through a Contact Us link in the application.

- **Gain the advantages of decades of experience.** The EVAAS team is composed of former educators, professional statisticians, policy analysts and web specialists with as many as 20 years of experience delivering value-added modeling in a production environment across more than 20 states.
- **Have confidence in an externally validated methodology.** The reliability of EVAAS reporting has been reviewed and confirmed by prominent experts such as four US Department of Education Peer Review Committees, the Government Accountability Office, the RAND Corporation and WestEd.

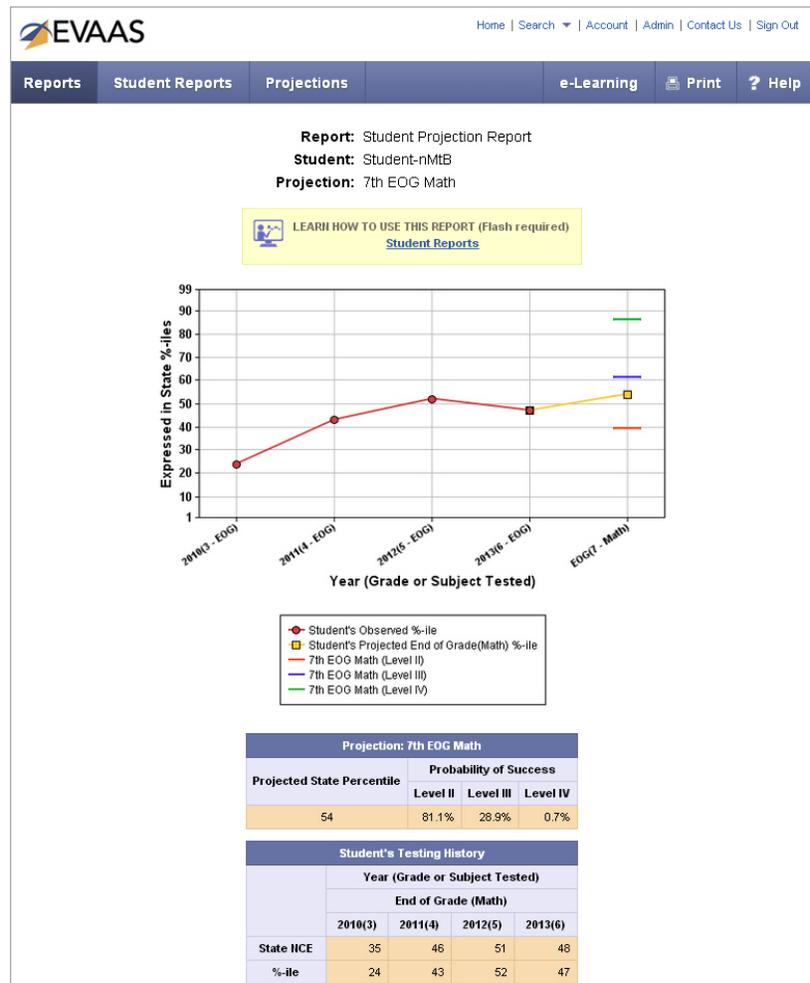


Figure 1: A sample student-level projection.

## Overview

Reliability of information has been, and always will be, the primary driver behind the development of all EVAAS models. By following the progress of individual students over time, EVAAS provides balanced reporting that supports all students' growth while fairly and transparently assessing the effectiveness of educators.

## Reflectively Identify Strengths and Opportunities for Improvement

Insights derived from analyzing years of data lead to intelligent resource and instructional decisions that improve teaching and learning.

EVAAS provides value-added analysis grade-to-grade and subject-to-subject for districts, schools and teachers, and reporting provides valuable feedback about curriculum implementation and the success of the instructional strategies.

## Predict Student Success

EVAAS reports on students' predicted success probabilities at numerous academic milestones – such as the upcoming grade level proficiency, high school graduation requirements and various college success indicators, including advanced placement exams, the SAT and the ACT. Individual student reporting is accessible to every teacher who is authorized by local policy to view the student-level information.

## Make Comparisons to Gain Insight

Interactive scatterplots enable users to visualize the impact of various progress metrics and the students who are served. For example, student achievement or growth can be compared to a variety of socioeconomic and demographic variables to assess whether all subgroups experience optimum educational outcomes. This powerful feature allows users to select the x and y axes variables to plot; drill down to detailed performance information at the district, school and teacher level; and zoom into any area within the scatterplot for further analysis.

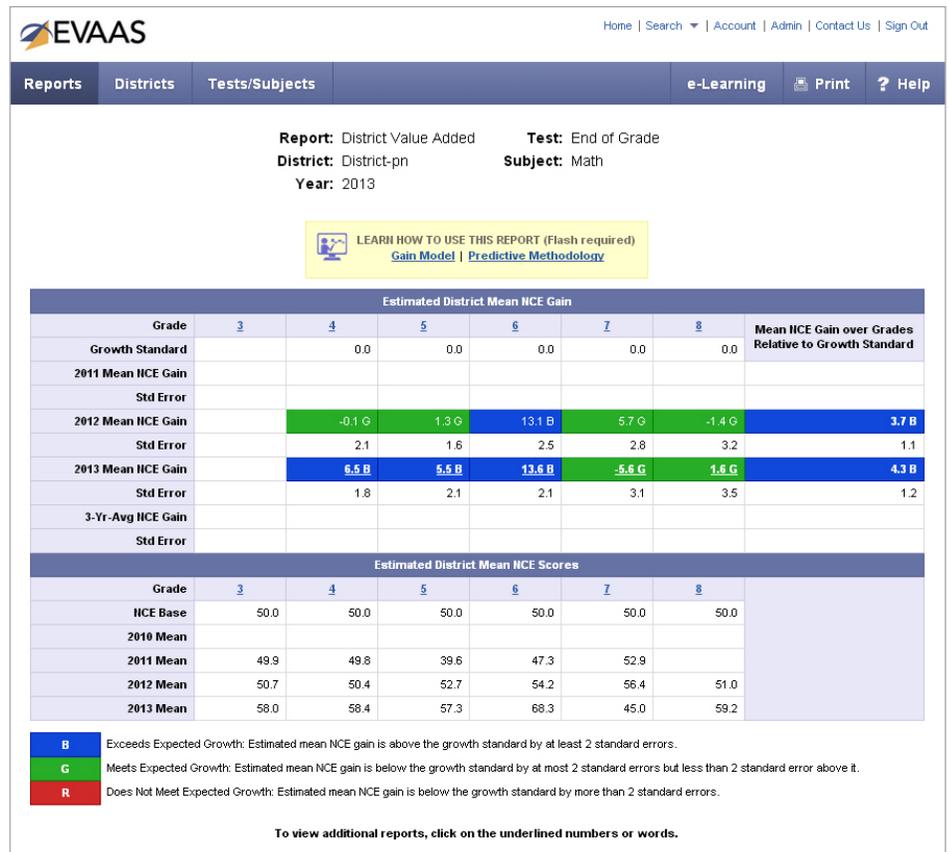


Figure 2: A sample value-added report for a district.

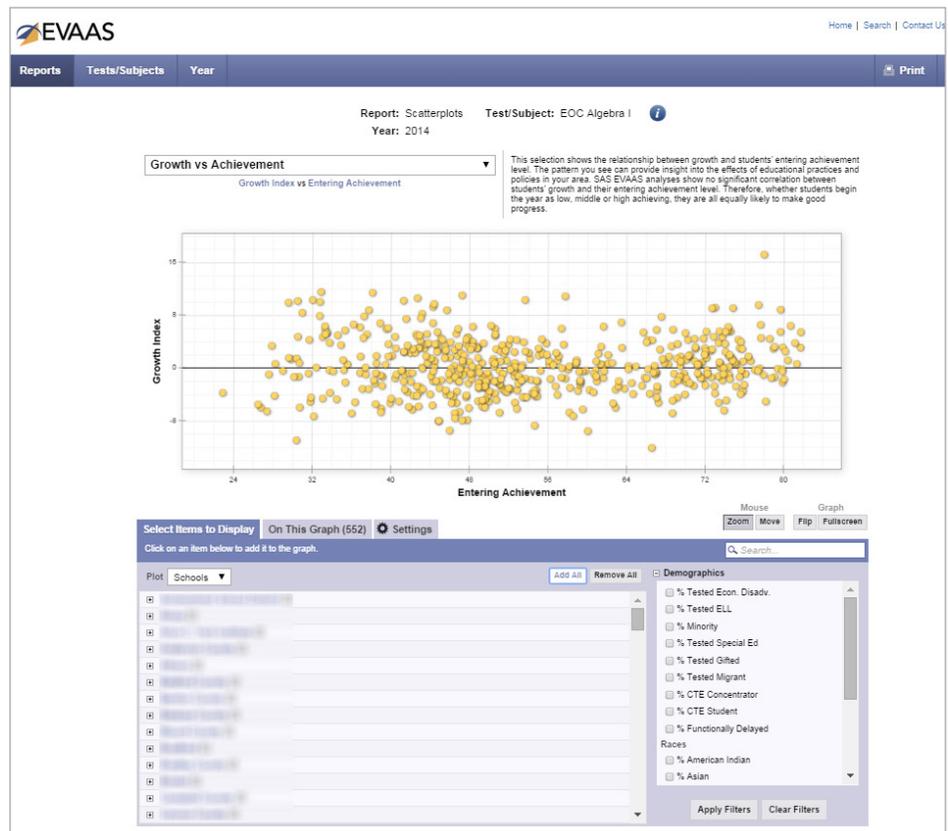


Figure 3: A scatterplot showing the relationship between growth and student achievement.

## Identify Students at Risk for Underachievement

By viewing the academic preparedness of incoming students as well as the growth patterns within classrooms, educators have the opportunity to plan effectively, differentiate instruction and help students progress year to year. Diagnostic reports reveal at-risk students, thereby enabling earlier intervention.

## Use Custom Reports

With custom reports, educators are empowered with the flexibility to display information in a variety of forms such as dashboards that report college readiness or upcoming grade-level proficiency, or custom student lists to monitor the effectiveness of programs. EVAAS can also build customized reports into the web application for frequent use based on specific needs.

## Export Data

Authorized users can export both value-added and projection results, and download them into a variety of formats for independent use and research.

## Verify Student-Teacher Linkages

The EVAAS roster verification process enables teachers, school administrators and district administrators to verify that teachers are linked accurately to students. By enabling educators to specify proportions of instructional responsibility for each student, EVAAS ensures that students' academic growth is tied to individual teachers in the fairest and most accurate way possible.

EVAAS applies the statistical rigor necessary to provide precise and reliable information on students' growth by addressing these challenges:

- Including students with missing test scores without introducing major biases that come from either eliminating the data from students or by using overly simplistic imputation procedures.
- Exploiting all of the longitudinal data for each student, even when the historical data is on differing scales.
- Providing educational policymakers flexibility in the use of historical data when tests have changed over time.
- Managing the data challenges associated with student and teacher mobility.

## Build Confidence With a Secure, Proven Process

Upon receipt of the student testing data through a secure transfer process, the EVAAS team performs analysis of the data, including read-in, merging and quality control processes. The flexible and transparent EVAAS modeling is robust enough to accommodate a variety of adjustments in support of district or state policy changes.

Reports can be delivered in as little as four to six weeks after receiving clean and usable data. The district, school and teacher value-added estimates and student projections are then provided through a secure, hosted website and can be customized to fit a particular state or district.

Get more information about  
SAS EVAAS for K-12 at  
[sas.com/evaas](http://sas.com/evaas).