Improve student outcomes and understand school performance through data and analytics

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THE POWER TO KNOW®

"[The Every Student Succeeds Act] allow[s] for the use of multiple measures of student learning and progress – along with other indicators of student success – to make school accountability decisions."

John B. King Jr.
US Secretary of Education[1]

Challenges

- Assessing performance using "snapshots" in time. States struggle to get a complete picture of student performance that goes beyond test scores and graduation rates.

- Generating accurate, understandable state and federal reports. Data access and analysis issues make it difficult to create reports that easily convey a complete picture of student and school performance.

- Measuring and documenting improvements in student success. It's difficult to collect timely, relevant P-12 data, analyze it to demonstrate progress of students and schools, and determine how to better prepare students for college and career.

- Assessing the need for improvement and intervention. Quality data and analysis is needed to identify low-performing schools and subgroups of students, and to implement actions to get them back on track.

[1] www.help.senate.gov/imo/media/doc/King9.pdf

Your Goal

Passage of the Every Student Succeeds Act (ESSA) is having a tremendous impact on each state's P-12 system. States now have much more flexibility to develop performance goals, accountability systems and interventions for struggling schools. Each state will be responsible for gathering data on indicators such as test scores, graduation rates, student growth and English-language proficiency – as well as "nonacademic" indicators – and analyzing that data for numerous student subgroups.

But challenges exist. How can states create systems that will accurately demonstrate student success, as well as indicate where course corrections are needed? This is critical to provide transparency and hold schools and districts accountable for performance.

The answer is by capturing quality data and utilizing advanced analytics that:

- Create an accountability system of key academic and nonacademic indicators, disaggregated among student subgroups.
- Develop school report cards that incorporate factors such as English-language proficiency, chronic absenteeism, educator qualifications and per-pupil expenditures.
- Compile complex data in an understandable way to document student success, demonstrate program value, implement improvements and meet reporting requirements.

Our Approach

Use SAS® software's superior data integration, quality and analytics to ensure that the design of your P-12 systems will get students career- and college-ready. SAS helps you:

- **Monitor effectiveness**. Use multiple measurements and analyses to create a holistic picture of where improvements are needed.
- **Inform policymakers and stakeholders**. SAS turns complex data into visualizations showing positive student outcomes.
- **Develop governance structures and build data repositories**. It's easy to ascertain what data is needed, how it will be collected, where it will be housed and who has access to it.
- **Correlate reporting systems**. By correlating system data, SAS helps you illustrate relationships between student academic performance, educator effectiveness and per-pupil expenditures.
- **Ensure data quality while protecting privacy**. With SAS, you can integrate, manage and ensure the quality of data from multiple sources while protecting student and educator privacy.
- **Track programs and student success longitudinally**. Analyze longitudinal data to spot trends and improve the state education systems and policies.
- **Build foundations for success in career and college**. Collect and analyze secondary and workforce data to demonstrate the impacts of P-12 on long-term student outcomes.

**The SAS® Difference:
A comprehensive,
data-driven approach.**

**Case Study: A State
Department of Education**

What if you could ...

SAS uses a comprehensive analytical approach to address a broad range of education issues. SAS provides:

- **Experience with accountability systems, school report cards and state longitudinal data systems**. SAS has experience in establishing these systems, which are used to inform policymakers and stakeholders about student outcomes and effective programs and policies.

- **Data management**. SAS combines, cleanses and manages data from disparate sources across agencies and systems.

- **Domain expertise**. SAS has worked across agencies and departments to streamline the data gathering process, while compiling and sharing information with stakeholders to develop the most effective education policies and programs.

- **Advanced analytics**. SAS advanced analytics enables you to assess the effectiveness of programs and policies across the P-12 system. Policymakers can see improvements in student outcomes, spot patterns, correct course and reallocate budgets to programs delivering results.

- **Data visualization capabilities**. SAS pulls together all relevant data into a well-rounded picture using dashboards and visualizations. Users can visually interact with data; answer questions quickly; make more accurate, data-informed decisions; and easily share their findings with others.

- **Expertise with growth models.** SAS has worked with state and local education agencies to calculate student growth measures and student projections using a variety of statistical models. These measures can be used for school improvement purposes as well as in school accountability models for both overall and subgroup-level reporting.

Situation

A state department of education wanted to create an accountability system that went beyond state test scores and graduation rates to provide a broader picture of school and student performance. The challenge was including academic and nonacademic measures of performance to fully understand what was working and where improvements were needed.

Solution

- The department deployed a comprehensive data warehouse using SAS Data Management, which provides flexibility to report on any and all relevant indicators.

- Using SAS, it built a public portal that provides access to a multitude of comprehensive reports.

- It chose to implement key indicators – including three ways of measuring graduation rates, achievement on state assessments, student growth, post-graduation preparedness, college enrollment, chronic absenteeism, physical fitness, and access to the arts – to assess school and student performance.

Results

- Users have a rich, current understanding of school and student performance.

- The new system will lead to a balanced, multifactor perspective of student, school and district performance.

- Teachers and leaders can focus on the students behind the numbers and develop plans to strengthen their learning and education.

Improve student education outcomes?

What if you could use data management and data quality to demonstrate the effectiveness of programs and policies?

Improve identification and quantification of indicators of performance?

What if you could attain and analyze data to make informed decisions that will improve student learning and outcomes?

Make data-informed decisions?

What if you could enable policymakers to make more informed decisions that will positively influence student outcomes?

SAS Facts

- SAS software is used by more than 3,000 educational institutions around the world.

- SAS provides P-12 and degree-granting educational institutions access to SAS software at a significantly discounted rate, free curriculum and mobile apps for K-12, and free and low-cost access to SAS software for teaching and learning.

- Today, SAS customers at more than 80,000 sites use our software to improve performance and deliver value by making better decisions faster.

Learn more at **sas.com/P12**