

Edtech ROI: Data Insights and Time Savings from Student Analytics

VIRGINIA DISTRICT REPLACES SPREADSHEETS AND OUTDATED, TIME-CONSUMING SOFTWARE WITH POWERSCHOOL ANALYTICS & INSIGHTS PRODUCT



The IT department at Virginia’s Fredericksburg City Public Schools struggled to analyze student data for other department needs. The small team of two staff used spreadsheets and pivot tables, which were quickly outdated once any data changed.

Plus, it’s difficult to gain clear insights or takeaways from a spreadsheet limited to simple cells, rows, and columns.

“There was a lot of pressure on IT staff,” says Michael George, Fredericksburg City Schools’ chief operations and information officer. “Anytime anyone wanted information, they came to IT. When making manual changes to data and spreadsheets, analytics took lots of time and wasn’t sustainable long-term.”



5 SCHOOLS



3600 STUDENTS



2 DATA IT STAFF

The district’s data analytics struggles actually went back even further. Previously, the district used software for KPI and assessment dashboards, but managing the product took too much time for IT staff.

AT A GLANCE



Challenges

- Time-consuming process to pull data together for insights
- Insights pulled from spreadsheets were quickly outdated once data changed
- Lack of access to data analytics outside of IT staff



Solution

- [PowerSchool SIS](#)
- [PowerSchool Student Analytics](#)



Results

- IT staff pull data in minutes versus hours
- Real-time data provides insights into discipline and attendance trends
- 30% staff usage with easy-to-use dashboards opening up analytics access

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Chief Operations and Information Officer
Fredericksburg City Public Schools, VA

“The level of experience and knowledge to use that program scoped down to the technology department, which put a lot of pressure on us,” says George, who has worked at the district since 2008. “Anytime somebody wanted to pull attendance data and correspond it to discipline or another metric, we would be the ones to pull that together. The challenging part is that once we pulled the data together, the person asking for it would change what they needed. Being able to do that consistently over long periods of time was difficult.”

The district had just two IT staff to manage those data pulls, along with all of their other job responsibilities. The product was not a Software as a Service (SaaS) solution, leaving hosting, management, and maintenance up to the already overburdened technology team.

“It was too time-intensive and not cost-effective. We were dedicating a significant amount of one person’s time just to managing and maintaining the product,” says George.

Overcoming Data Analytics Challenges: A Superintendent’s Initiative

The district’s superintendent recognized the data analytics struggles and wanted transparent dashboards that were easy to access and understand. In its search for a data analytics solution that would meet its needs, Fredericksburg City Schools chose PowerSchool Student Analytics, part of the Analytics & Insights platform.

A significant factor in choosing the PowerSchool product was its satisfaction with using PowerSchool SIS, North America’s most widely used student information system and part of the Student Information Cloud. Multiple departments quickly saw the potential benefits the product could provide. George says that instruction, finance, and transportation departments all expressed immediate possible uses and supported purchasing Student Analytics.

By choosing Student Analytics—an award-winning data analytics solution that gives schools and districts holistic analytics for a complete picture of student success—the district would be making the process of seeing all their data together much easier. The product brings data together from multiple products, including their SIS, LMS, behavior, special education, and assessment software into a single platform. With reporting, analytics, visualizations, and actionable tools all in one place, Fredericksburg’s staff always had the data they needed at their fingertips.



How Student Analytics Has Benefited the District and Instructors

Fredericksburg staff were hesitant to use Student Analytics at first, which is common with any new product launch. But because of the easy learning curve, intuitive interface, and potential benefits, adoption quickly took off, says George.

George explains the difference in pulling data now with Student Analytics compared with the old method by his IT team.

“(Student Analytics is) probably the most powerful tool they have.”

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“We have a couple of people in instruction who really dive deep into discipline and attendance and do some massive correlations between the two of those. That’s probably the most powerful tool they have,” says George. “That process alone for our department was just incredibly difficult. Putting tables together, pulling discipline data out of school, out-of-district, out-of-school placements, in-school suspensions, different types of discipline codes, and associating that with grades and attendance was really difficult. We couldn’t do it to the same level as what Student Analytics does.”

George says that level of correlation was one of the hardest things his team was ever tasked with. “It would take our IT team days to put that together. And now it’s at others’ fingertips.”

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Using Analytics to Improve Discipline Initiatives

Student Analytics empowers staff to quickly identify longitudinal trends and changes in district, school, classroom, and student performance across enrollment, special programs, attendance, behavior, and academics.

By using Student Analytics dashboards, staff noticed a disproportionate rate of discipline for African American female students in every building except one. If one of those students received a referral, there was an 80% chance that the student would receive one or more days out of school placement. That existed in three of four schools, and the fourth school had a female principal.

“I don’t know if we would’ve ever found that trend on our own without Student Analytics.”

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Because they noticed that trend, “now we can address it and do disciplinary training and professional development,” says George. “I don’t know if we would’ve ever found that trend on our own without Student Analytics.”

George adds that the rates have improved after disciplinary training for administrators over the past year so that they’re no longer disproportionate.

Improving Attendance with Data Analytics

Student attendance is one of the biggest challenges facing school districts today, and it’s a top priority for Fredericksburg City Schools. When students aren’t in school, they’re losing out on critical instruction and can fall behind.

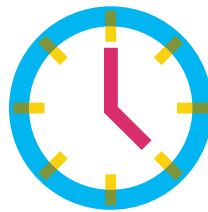
The district used Student Analytics to see trends in student absences, giving them data insights to make changes to address absenteeism issues. They looked at data over four years to see where they had dips in attendance, and then determined what those dips corresponded to.

One of the areas with the highest absence rates was non-Christian holidays. The district has a high Muslim population, which led to a 10-point decrease in attendance on non-Christian holidays. The district addressed the issue by aligning calendars to make those holidays teacher in-service days, giving students the day off, and helping keep the attendance rate higher for the rest of the days in the instructional calendar.

“Our director in charge of attendance can watch absences daily, which is powerful for her. She can watch that number and question if she ever sees an anomaly in it,” says George.

Analyzing Student Data Is a Continuous Process Made Easier with PowerSchool

George says that he and his department use Student Analytics constantly to look for data trends and abnormalities so they can address them and make data-informed decisions.



What once took hours to pull information for the superintendent now takes minutes.

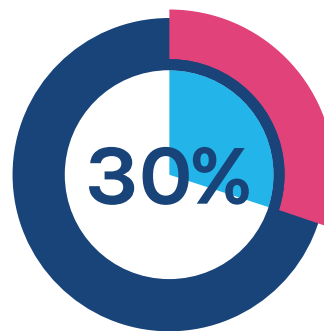
“I like to work with data, follow it, and look at trends,” he says. “Before Student Analytics, we were so wrapped up in providing what others asked for and not looking deeper than that. I don’t think I would’ve ever seen these trends that we’re seeing on my own. Even when our superintendent just wants quick demographic information, I can get it quickly. Pulling it right off the homepage takes just a few minutes and saves me hours every month.”

And because Student Analytics is so user-friendly, other departments can dive into the data independently without relying on the district’s overburdened IT team.

“For people to find information on their own, it’s much more powerful,” George says. “Everyone ends up using it.”

George says that even without training, 30% of teachers regularly log in to see insights on their students.

“My wife is a teacher and loves it because she can go in and look at her students, see how they’re doing based on multiple factors, and see how they’re doing in other



30%
of teachers regularly access student insights without any formal training

classes based on reports. She can get a feel of what's going on with her students," says George.

Administrators use Student Analytics to track discipline and attendance, logging in at least once a week. George says they primarily use the KPI dashboard to compare how students are doing with the instructional week, the number of incidents per week, and the time of day for incidents.

"By looking at multiple factors, administrators started looking at how they can manage their building better by time of day rather than by discipline as a whole."

Better Data, Easier Access, No More Spreadsheets

PowerSchool Student Analytics, part of the Analytics & Insights platform, is helping Fredericksburg see multiple data points of each student, transforming the district's approach to data analysis. By replacing manual spreadsheets and outdated software solutions with a user-friendly and intuitive platform, the district has gained unparalleled insights into student performance, attendance patterns, and disciplinary trends.

This shift has alleviated the burden on the IT department and empowered staff across departments to make informed decisions based on real-time data.



Learn More About Student Analytics

Access intuitive K-12 analytics tools for a complete picture of your schools, classrooms, and students.

[Watch a Demo](#)

