performance matters

DATA-DRIVEN INSTRUCTION

CASE STUDY

St. Mary's County Improves Student Performance on State Tests and Graduation Rate with Data-Driven Instruction

SUMMARY

Over the past decade, St. Mary's County Public Schools has made significant changes in the way it manages student assessment data. Moving from spreadsheets to the web-based Performance Matters Assessment and Data Management System (ADMS), to the Unify assessment platform, the district has transformed the way teachers and students think about assessment in the classroom. Thanks to a focus on rigorous standards and data-driven instruction, student performance has steadily increased on state tests in math and reading, and the high school graduation rate has hit an all-time high of 93.5 percent.

THE CHALLENGES

- Student performance data in spreadsheet
- Inability to easily connect data from multiple measures

"We've been using assessment data to measure student performance and to guide our decision making for years. We were doing this even back in 2005, when we were still managing this data with spreadsheets," said Regina Hurley Greely, director of learning management for SMCPS. "The problem with spreadsheets, however, was that we couldn't disaggregate the data by item or view the data by standard without adding to the teachers' workload."

St. Mary's County Public Schools
Leonardtown, Maryland

District statistics:
Schools: 27
Students: 17,841
Grades: K-12
Setting: Rural
https://www.smcps.org

Student population:
<1% American Indian/ Alaska Native
19% African-American
3% Asian/Pacific Islander
68% Caucasian
6% Hispanic
4% Multiracial
<1% Native Hawaiian/ Pacific Islander

32% Economically Disadvantaged
<5% Limited English Proficient
9% Special Education

Mobility:
18% Elementary School
13% Middle School
10% High School

THE SOLUTIONS

- Performance Matters ADMS
- Unify
- Early Warning System
- Student Learning Objectives (SLO) module

In 2005, SMCPS moved from spreadsheets to the Performance Matters ADMS. "With ADMS, we could correlate data from multiple sources and disaggregate the data to analyze student performance from the district to the individual level," said Greely.

In 2015, the district then took its technology implementation to the next level with Unify. Unify is a collaborative technology platform that allows educators to author and administer authentic assessments, analyze student data from multiple sources, and act on that information to improve teaching and learning.

"Unify provides an excellent way for teachers to get instant feedback about the performance of their students," said Greely. "As a result, we no longer think about assessment as a series of checks and balances for classroom instruction over period of time. Instead, it's simply part of our instructional process."

Engaging Teachers in Assessment Development

With Unify, teachers within a district — or across multiple districts or states — can pool their resources and work together to create, share and review assessment content. This not only engages teachers in the assessment process, but it makes the development of high quality items and assessments economical.

To introduce Unify to teachers, Greely first offered evening professional development sessions. She then offered sessions after school to give teachers an opportunity to work together to develop assessment items and practice administering their assessments.

"During these sessions, we came up with the idea to use Unify to build assessments that teachers could use as exit slips. It was then that teachers realized how valuable it could be in their daily instruction," said Greely.

Unify is also helping teachers dive deeper into Maryland's College and Career-Ready Standards, which incorporate the Common Core State Standards, by giving them the ability to create technology-enhanced items (TEIs). "To create TEIs, you have to really understand the depth and breadth of each standard. So, these new interactive item types are helping teachers dissect our standards to a much finer extent," said Greely. "Teachers also love that the TEIs allow them to reach diverse learning modalities, and that they more accurately reflect the different types of teaching and learning that go on in our classrooms."

Administering Online Assessments

SMCPS teachers now regularly use Unify to create and administer exit slips and assessments using district, third party and state-provided item banks, and by developing their own items.

"We don't yet have one-to-one devices for all students in our schools," said Greely. "Our teachers say if we did, they'd use Unify all the time."

In the meantime, the district is working to make online assessment with Unify available to as many teachers and students as possible. Toward that end, all elementary schools now administer district-created "problems of the week" in mathematics using Unify. In addition, at the secondary level, all English teachers now administer problem-based assessments (PBAs) with Unify.

Data-Driven Decision Making

Teachers can then use the results data to modify their instruction or group students according to their level of mastery.

"While similar to the ADMS, teachers like the reports in Unify, particularly the student item analysis and item statistics reports since they are immediately available in Unify," said Greely. "When you're looking at the student item analysis report, you can instantly see which students need to be re-taught and which can move forward. This is transforming our classroom teaching because it allows us to easily group students according to their immediate needs, right down to the standard level or item level. Most importantly, the Unify system provides teachers with the ability to create and gain feedback on assessments that are reflective of their classroom instruction."

In some elementary schools, for example, teachers use this data to create revolving groups for math and reading instruction each Friday, based on that week's assessment results. "A student who wasn't successful on the standard will go to one classroom for re-teaching, while a student who was successful will go to a different classroom for acceleration or deeper exploration of a standard," said Greely. "As a result, teachers now feel responsible for the success of all the children who rotate through their classrooms, instead of just the 30 students they regularly have in their class."

In addition, the reports help SMCPS to more effectively target its resources. "If the district-level data shows that students are not mastering a particular standard, we can drill down to school, teacher and student levels to see where we need to provide additional supports or more professional development," said Greely.

"Unify is the most dynamic platform we could possibly use because it reflects the needs of our state and our school system — and that's the power of Performance Matters."

- Regina Hurley Greely
Director of Learning Management

CASE STUDY

Monitoring Early Warning Indicators

In the fall of 2015, SMCPS also launched the Early Warning System, a customizable reporting and filtering module that integrates with Unify. The district uses the Early Warning System to track attendance rates, absences, truancies, behavior, course failures, retentions, state test performance, local assessment performance, and mobility. Educators then use these measures to quickly identify at-risk students so they can intervene as needed and monitor their progress.

"This data helps our teachers and school administrators to see the student as a whole, instead of just focusing on academic performance," said Greely. "It also allows them to easily see how other factors, such as mobility or discipline, can affect an individual to better inform their decision making."

RESULTS

- Increased use of data at all levels
- Steady increases in student performance on state assessments
- An increase in the graduation rate to an all-time high of 93.5 percent
- Savings in staff time and resources

Improving Performance on State Assessments

"The biggest benefit of Unify is that it's putting control of the assessment process in the hands of teachers, where it belongs," said Greely. "Because we can disaggregate data — from the district level to the individual student level — we can better focus our teaching and make the most of our instructional time. We can also focus professional development and resources on those areas where they'll have the greatest impact. As a result, on our state assessments, we've seen an increase in the percentage of students performing at the Proficient and Advanced levels, and a decrease at the Basic level."

Maryland School Assessments*
Percentage of Students Proficient or Above

Mathematics

2005	2013	
Elementary schools 77.4%	**Grade 3**	86.7%
	Grade 4	93.5%
	Grade 5	86.5%
2005	**2013**	
Middle schools 56.0%	**Grade 6**	86.5%
	Grade 7	77.3%
	Grade 8	76.2%

Reading

2005	2013	
Elementary schools 79.0%	**Grade 3**	84.1%
	Grade 4	89.3%
	Grade 5	89.4%
2005	**2013**	
Middle schools 72.3%	**Grade 6**	84.1%
	Grade 7	83.2%
	Grade 8	80.3%

** Data for 2014 did not include the entire student population due to the PARCC field test. In 2015, the state of Maryland moved to the PARCC assessment.*

Increasing the Graduation Rate

In addition, in 2014, the four-year cohort graduation rate climbed to 93.5 percent, an increase of 10.7 percent over five years. At the same time, the four-year cohort dropout rate fell from 10.98 percent in 2010 to 4.44 percent in 2014.

"At the secondary level, we use online content to infuse technology into the curriculum and create a blended learning environment, which has had a very positive impact on students' learning," said Greely. "If a student doesn't master something or fails a quarterly assessment, we can then use the data in Unify or the ADMS to guide us in re-teaching or to give the student an opportunity to recover the credit or demonstrate mastery in a different way. Then we can re-assess with Unify to see if the student has mastered the content or if they need additional intervention."

Four-Year Cohort Graduation Rate

	2010	2011	2012	2013	2014
SMCPS	82.76%	83.66%	87.70%	91.50%	93.46%
Maryland	81.97%	82.82%	83.57%	84.97%	86.39%

Saving Time and Money

"Performance Matters has helped us save a great deal of staff time and resources over the years," said Greely. "With the data provided by ADMS and Unify, teachers can actually focus on teaching instead of having to sort through spreadsheets to try to figure out what the student needs. It's made us more efficient and effective in promoting individual student progress."

Working in Partnership

In 2016, SMCPS looks forward to expanding its use of Unify, including adding the SLO Module, to support its focus on student achievement and assuring that all students meet rigorous standards.

"Unify is the most dynamic platform we could possibly use because it reflects the needs of our state and our school system — and that's the power of Performance Matters," said Greely. "They're the most customer-centered company I've ever worked with. They listen to what we need and they understand where we're going. They are truly invested in our students succeeding and that to me is what's important."