Merit Prep Personalizes Learning One Playlist at a Time

16 November 2016

This article originally appeared on EdSurge, as part of its guide, The Data Workout: How It's Impacting Teaching and Learning.

To get up to grade level in science, Amarachi Onyemaobi knew she needed to understand the systems of the human body. Just as importantly, she knew how long it would take and what she needed to do to master the concept.

A freshman at Merit Preparatory Charter School in Newark, New Jersey, Onyemaobi has access to Spark, Matchbook Learning's online information platform that uses data to help students and teachers track exactly what skills they need to master—and to set goals and find resources to help them get there. "It's easier for me to do my work because the teacher knows where I'm at, and I know how to move forward," Onyemaobi says.

Following testing at the beginning of the year, Merit Prep students work with teachers to identify the standards they need to master and set goals to meet them; they then track them using Spark. In Onyemaobi's case, Spark

generated a learning document that estimated how long it would take her to learn about body systems and helped her teacher develop a customized “playlist” of online and paper resources she could work on individually.

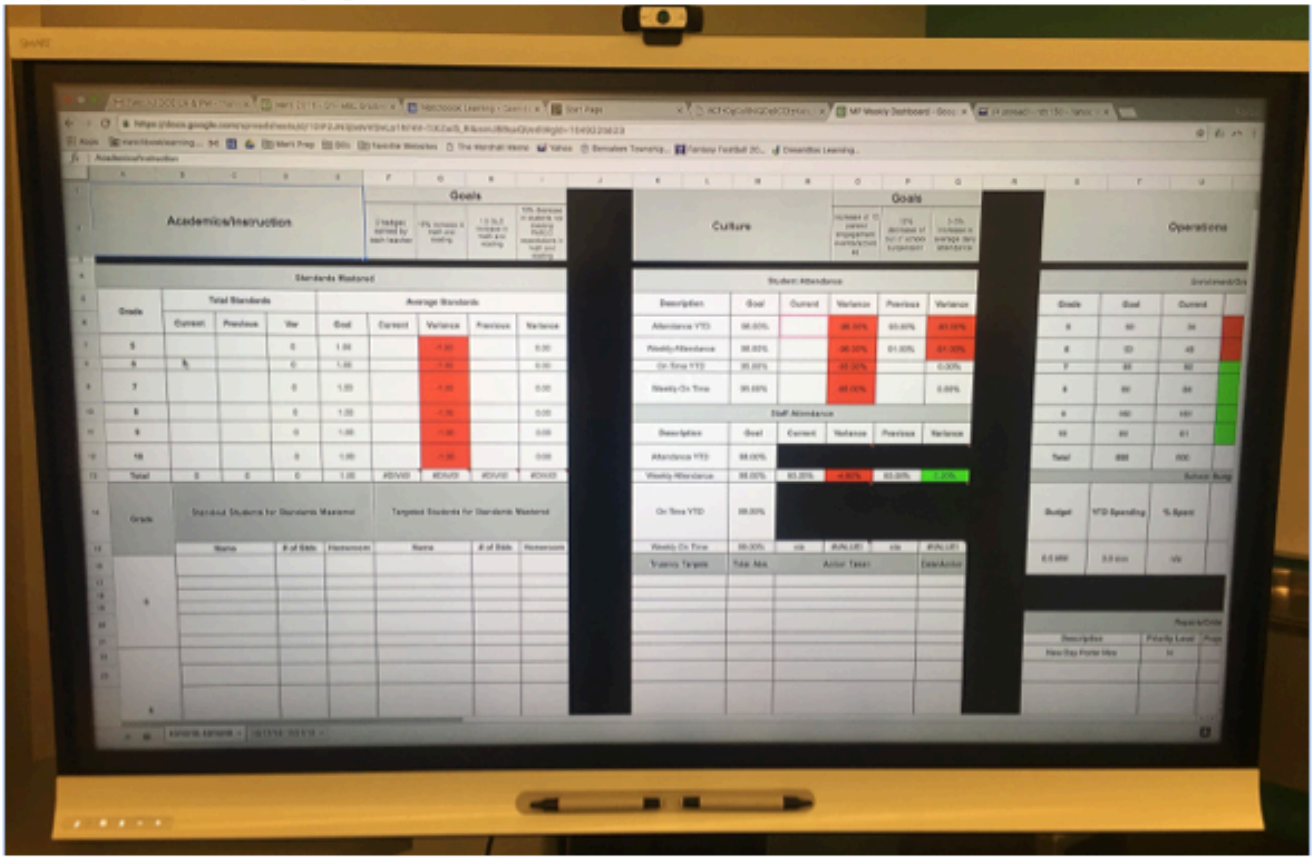
Once Onyemaobi completed her playlist, she had a one-on-one conference with her teacher, who assigned her a project to create a PowerPoint demonstrating how each body system corresponds with a real-world counterpart—the immune system as a hospital, the urinary system as the sewers, and so on. A formal assessment on key terms then closed the loop, but Onyemaobi’s presentation could now become part of the playlists her teacher puts together for future students. “If anyone’s having difficulties, the teacher can show it to them,” Onyemaobi says.

That’s the vision that Matchbook’s Spark information system has helped make a reality at Merit Prep. Initially developed in-house to consolidate student data from a broad range of assessments and other sources, Spark has been expanded by Matchbook’s technology team to provide both teachers and students personalized views of their progress.

At Merit Prep, goal-setting begins with Performance Series testing at the beginning of the school year. The assessments are aligned with the school’s units and Common Core standards, and data is used by teachers to break down individual student goals by quarter, then week

to week. “Then they give them to students to plan their days accordingly,” says Ron Harvey, Merit Prep’s principal.

Harvey says Spark helps students set goals and monitor progress because it’s highly visual. “It lets them know where they are in the cycle,” he explains, “and the overview shows them how far they are from finishing a particular unit.”



A digital dashboard used in Merit Prep’s data room

Despite their use of technology and personalized playlists, Merit Prep and Matchbook both emphasize blended learning environments in which teachers play the key role. School leaders determined that coupling classroom instruction with digital learning is critical to ensure engagement, according to Harvey. Also, the personalized playlists originally focused primarily on gaps in students’

knowledge, meaning that students weren't exposed to grade-level content while working on them.

As a result, in this second year of working with the model, students address their personalized learning areas and are exposed to grade-level content simultaneously. LaNiece Primus, who teaches U.S. history at Merit Prep, devotes most of her class time to small-group instruction and conferences with individual students. Traditional whole-class lectures, a staple of high school history, are non-existent in her classes. "I'm constantly checking in with the kids to see if they're on pace, and if they're not, we're having conversations to figure out why," Primus says.

As a social studies teacher, Primus also uses Spark to track her students' reading data—information about their Lexile scores and ability to use informational texts. If a group of students is struggling with informational texts, for example, she can incorporate them into small-group instruction or personalized playlists that emphasize a particular history skill or concept. "I can help the ELA team by focusing on specific things that students are weak on," she adds.

Primus says that involving students in setting goals and tracking progress is building important planning skills. "It helps them figure out that you can't spend too much time on one task, or you'll fall behind on other tasks," she says. "When they know where they are, it makes it easier to

have conversations to move them forward."

Matchbook Learning schools also use the student data collected by Spark to track school-wide performance. Each school has a data room, where the leadership team uses large monitors to track, discuss, and plan around academic, cultural, operational, and student support data. Going forward, Merit Prep's leadership team will use its data room—which is in the process of moving locations—to identify trends and plan school-level goals in each of those areas.

Merit Prep's data room is in the process of moving locations

Merit Prep also connects student goals to grades, which in turn, are connected to the school's own big-picture goal—having every student achieve 18 months of growth yearly, as measured by its formative assessments. "That's

another way we drill home the importance of completing goals," Harvey says.

As for Onyemaobi, mastering the body systems has placed her ahead of the schedule she set at the beginning of the year; now she's moved on to another challenging subject. "I'm learning about DNA," she says, but her goal-setting has her looking even further ahead. "In college, you need to learn to learn by yourself since you're working independently," she explains. "I'm going to learn how to pace myself so I can self-manage and learn how to manage my time wisely."

Author bio

Karen Johnson is a Senior Program Officer at the Bill & Melinda Gates Foundation. Karen's work centers around three areas of K-12 personalized learning: measuring product efficacy of edtech tools with the Learning Assembly, continually gauging and understanding what teachers need (Teachers Knows Best), and spurring development of edtech tools that meet the needs of teachers and students. Previously, Karen spent a decade marketing and building K-12 digital tools in social studies, science, math and language arts. She has spent countless hours conducting usability tests with teachers and working with software developers to implement teachers' feedback. Karen is currently exploring how edtech tools can better meet the needs of English Language

Learners.