# Digital Assessment and Student Achievement in Montgomery County School District

*Montgomery County, MD has implemented digital assessment and learning management that helps instructors connect curriculum to data, enabling personalized learning with a real-time view of student achievement.*

## The Challenge

With more than 158,000 students, 202 schools, and more than 22,000 teachers and staff, Montgomery County School District is the largest school system in Maryland and the seventeenth largest in the United States. It's no surprise that conducting a standardized assessment involved a commitment of time, energy, and logistics that would rival a major military operation.

"We had to get students' Scantron sheets printed out," explained Angelica Smith, a language and literature content specialist at Dr. Martin Luther King Middle School in Montgomery County. "We had to get these giant boxes of test booklets and written response sheets delivered to our classrooms. And I have boxes upon boxes, cabinets upon cabinets of all this paper that I had to sort and manage, to grade bubble and written response scores. We might get our data back three, four, or five days later. So by the time the students even really even see their assessment score it's not as meaningful to them."

The pomp and circumstance surrounding assessments meant that it became more difficult for instructors to focus on the learning behind the testing. Paper and pencil can only accommodate specific question types, which are providing an increasingly poor experience in preparing students for online PARCC assessments. Drag and drop, multimedia, and selecting text with a cursor are impossible to emulate when using solely analog tools.

## The Solution

Montgomery County School District released its Strategic Technology Plan in July 2014, after receiving board approval in May 2013. The Plan outlines "a multiyear effort to provide all students with access to mobile computers and a cloud-based learning platform that will enhance creativity and collaboration in the classroom." As a key component of that plan, the District has implemented Engrade, a learning management and assessment platform, as the technology behind *myMCPS*, a full-featured online learning community.

"We were really looking for anytime-anywhere instruction, and we wanted to create an environment where kids' learning is just part of the natural process," said Carrie D'Amour-Booth, an instructional technology specialist for Montgomery County Public Schools. "So being able to provide students an environment where they can gain access to the materials they need, where they can have it structured in a logical learning order, and then also assess and find out what do they know if they already know, what do they know if they don't, and what do we do about it."

Montgomery County's adoption strategy for Engrade starts with key schools in the district where technology has been historically lacking. The rollout of the system begins with these schools, where the enthusiasm for the new solution can help create positive awareness at other locations and improve adoption rates. For the 2015-2016 school year, Montgomery County plans to replace high school final exams with online tests administered through Engrade.

"Last year when then students took PARCC, it was their first experience taking any kind of test that had nontraditional ways of answering questions—drag and drop, or selecting a sentence within a passage as opposed to just selecting A, B, C, D," said Ms. Smith. "With Engrade, we can use that platform to create regular classroom formative assessments where they can select the text within the passage. They can drag and drop. They can rank answers. They can manipulate items on the screen in the same way that they would on the PARCC."

## Learning Outcomes

During the summer of 2015, Montgomery County School District utilized Engrade to track student performance. Instructors were able to define their standards for achievement in the system, and could then grade students with an eye toward their growth against those standards. This was a new capability for these instructors, and enabled them to provide more personalized instruction to help each student progress toward mastery of standards.

"The most positive benefit I've seen in my classroom thus far from using Engrade is that all students are engaged," said Stacy Sanders, a math teacher at John F. Kennedy High School in Montgomery County. "Everyone is making a genuine attempt at learning the material and answering the questions, and they're all excited at the end to see their score. They know that there's always an opportunity to go back and to reassess and see where the problem is."

## ROI

Using digital assessment, Montgomery County can improve instructor efficiency with computer testing that removes paper grading from the process. Teachers can deploy pre-existing assessment materials from the district or create their own tests, with robust scoring capabilities that align to district and state standards. The immediate availability of scoring allows for more personalized instruction.

"My teaching has changed because I'm able to quickly see who understands something," said Rebecca Hubbard, a fourth grade teacher at Glen Allen Elementary School in Montgomery County. "I can go back in and manipulate the way I ask something, or I can add something that's really going to aid students. It's made me think; what else do I need to give them to help them understand something better? It's actually freed up time. I'm not standing at the copier. I'm right there with the materials I need at my desk, right then and there, making these assessments."