



## Rotation Model

The most common form of blended learning is the rotation model, in which students within one course rotate between online and face-to-face instruction. The face-to-face component may involve full-class or small-group instruction, group projects, or individual tutoring.

A common form of the rotation model is flipped classrooms. Another is lab rotation, in which students go back and forth between traditional classrooms and computer labs during a course.

The District of Columbia Public Schools created a rotation model in 2012, which varied from classroom to classroom. After piloting several programs in the 2012-13 school year, two elementary schools are now fully blended for math and literature.

The two schools have blocks of about 120 minutes each for math and literacy. After 10 minutes of whole group instruction, students rotate through three stations for 35 minutes each.

For literacy, the stations include small-group, guided reading with an aide; vocabulary with a teacher; and independent online coursework. Students use Lexia for foundational reading skills, and access digital books through myON Reader. They also use the software programs ST Math and First in Math, which feature game-based instruction.

Schools are seeing positive results. From 2012 to 2013, the average percentage of students considered proficient or advanced was over 17 percent for students using ST Math from the MIND Research Institute, compared to just 4.5 percent for those in traditional classes.

Another 33 Washington, D.C., elementary schools are piloting the ST Math program this year, and 40 are testing literacy programs. Implementing the software districtwide gives technology leaders larger sample sizes to see what is increasing achievement.

A district spokesperson says, "It's been a challenge to get teachers to use the plethora of student data recorded by the online programs, as the teachers don't always have the skills or time to analyze it." Teachers can see which content students spend the most time on, and the questions and concepts that lead them to struggle. This can translate into more customized support and one-on-one classroom time with students.

The two D.C. blended elementary schools now share a technology instructional coach who models lessons in blended learning as professional development for teachers. The coach also creates weekly data reports, and meets with teachers to show them what the data means and how to use it to improve instruction.