INTRODUCTION

After receiving a U.S. Department of Education Race to the Top grant in December 2012, the Enlarged City School District of Middletown (Middletown) immediately began designing its blended-learning initiative. In Fall 2013, Middletown started a small-scale, blended-learning cohort that used a Station Rotation model for reading and math in 33 K–5 classrooms across the district. The district increased its use of blended learning during the 2014–15 school year and, by the end of the year, had implemented blended learning in 120 K–8 classrooms. Middletown is currently designing a Flipped Classroom model of blended learning for math, English Language Arts, and science that it will implement at the high school starting in the 2015–16 school year. Students at elementary schools using blended learning in the district have shown greater growth than students in traditional classrooms in the district in both reading and math, based on Northwest Evaluation Association’s (NWEA) Measures of Academic Progress (MAP) scores.

KEY ASPECTS OF BLENDED LEARNING PROGRAM

- The district’s elementary school students have two 75-minute blocks—one in reading and one in math—each school day.
- At the elementary and middle school levels, the district uses a Station Rotation model that varies day-to-day based on students’ instructional needs. Teachers use student data from the online content to create new rotations daily.
- The district implemented a Station Rotation model at the elementary school level at the start of the 2013–14 school year, expanded it to the middle school level in the 2014–15 school year, and is adding a Flipped Classroom model at the high school level for the 2015–16 school year.
- All of the district’s elementary school math and reading classrooms will be fully blended by October 2015.

Blended Learning Success Proof Points

- Students in blended classrooms outperformed students in traditional classrooms by 18% on Spring 2015 NWEA MAP and MAP for Primary Grades (MPG) reading scores.
- Students in blended classrooms outperformed students in traditional classrooms by 7% on Spring 2015 NWEA MAP and MPG math scores.
BLENDED LEARNING AT THE ENLARGED CITY SCHOOL DISTRICT OF MIDDLETOWN

Middletown first implemented blended learning at the elementary school level in Fall 2013. Initially, teachers could opt in to participate in the blended-learning program, and 33 elementary school teachers chose to make the transition during that first year. These teachers were instrumental in helping to design the district’s current blended-learning model.

Each school day, elementary school students have two 75-minute blocks of math and reading instruction with a teacher who specializes in the content area, as opposed to the more common approach in elementary schools where a single teacher teaches both math and reading. Students also have a 45-minute writing block and a 30-minute intervention that switches every other day between math and reading.

During these blocks, the teacher has discretion over how the rotations will occur, based on individual student learning needs. On some days, the teacher may provide whole class instruction for a brief period at the start of the block and then divide students into a traditional three-station rotation for the remaining time. On other days, the teacher may start with a station rotation, bring the students together for a whole class check-in, and then have some students work on online content while the teacher leads small intervention groups with other students. Middletown has coined the term “classroom flex rotation” to describe its model because teachers use data from the online curriculum, their knowledge of the content area, and student learning needs to determine the rotations each day.

Since launching its blended program, the district has used a variety of online content providers—and it continues to evaluate the effectiveness of its online content and change products as needed. The district is currently using Lexia Reading, Achieve3000, i-Ready, DreamBox Learning, TenMarks Math, myON Reader, and IXL Learning. All students have access to a Chromebook during the school day and can access the online content with a single sign on through the Highlight platform provided by Education Elements. Teachers use the same system to access all student data.

Middletown uses NWEA MAP scores to monitor student progress. It tracked the scores of 3,304 elementary school students who took the MAP assessment in Fall 2014 and Spring 2015.

About 52% of the students who took the NWEA MAP reading assessment were in blended classrooms. In every elementary school grade, students in blended classrooms showed more growth than their non-blended peers. Average reading growth scores of students in blended classrooms were 18.5% higher than non-blended students.

About 42% of the students who took the NWEA MAP math assessment were in blended classrooms. In every elementary school grade except for 2nd grade, students in blended classrooms showed more growth than their non-blended peers. Average math growth scores of students in blended classrooms were 17.2% higher than non-blended students.

District leaders are pleased with their blended-learning results and remain committed to ensuring that all elementary school math and reading teachers have implemented blended learning in their classrooms by October 2015. Blended learning has not yet received the same level of effort in the middle schools as it has in the elementary schools, and middle school growth scores in blended classrooms have not yet improved compared to traditional classrooms. As a result, the district plans to improve and expand its middle school blended-learning implementations during the 2015–16 school year. Additionally, during the 2015–16 school year, the district will begin a three-year, blended-learning phase-in at its high school. District leaders want to see high school students take more ownership of their learning and believe that combining a Flipped Classroom model with project-based learning will improve student achievement and help students transition to becoming independent learners—and therefore better prepared for college and careers.

“In the age of Common Core, we need elementary school teachers to be specialists and not just generalists.”

— Dr. Kenneth Eastwood, Superintendent, Enlarged City School District of Middletown