

MAP® Growth™ NCE Gains for 6th Grade Students Are 38 Percent Higher After Using Edgenuity UpSmart®

During the 2018–2019 school year, Seneca Valley School District piloted UpSmart with 6th grade students at Evans City (ECM) and Haine Middle Schools (HMS). From fall 2018 to spring 2019, results show that UpSmart students demonstrated statistically significant gains. Students at HMS demonstrated nearly 1.5 times their expected growth on the MAP Growth mathematics assessment (Figure 1). In addition, Edgenuity compared UpSmart students’ MAP Growth mathematics Normal Curve Equivalent (NCE) gains for the 2018–2019 school year (during UpSmart use) to the 2017–2018 school year (before UpSmart use). Data revealed that the 6th grade students’ MAP Growth NCE gains were 38 percent higher after using Edgenuity UpSmart (Figure 2).

SENECA VALLEY SCHOOL DISTRICT	
DEMOGRAPHICS:	
Enrollment: 451 Students	
White	90.7%
Hispanic	3.3%
Asian	3.3%
Multiracial	2.0%
Black	0.7%

Figure 1. Seneca Valley School District, Grade 6

Performance on the MAP Growth Math Assessment, Fall 2018 to Spring 2019

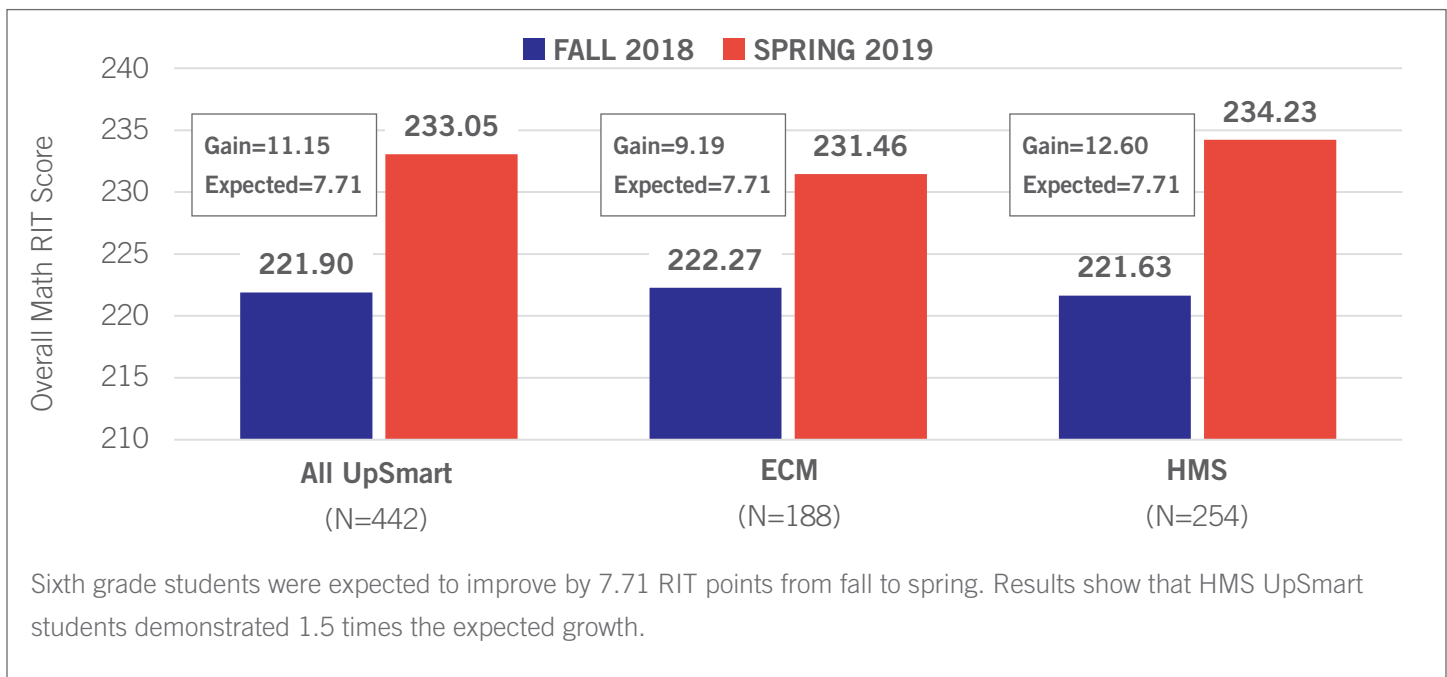
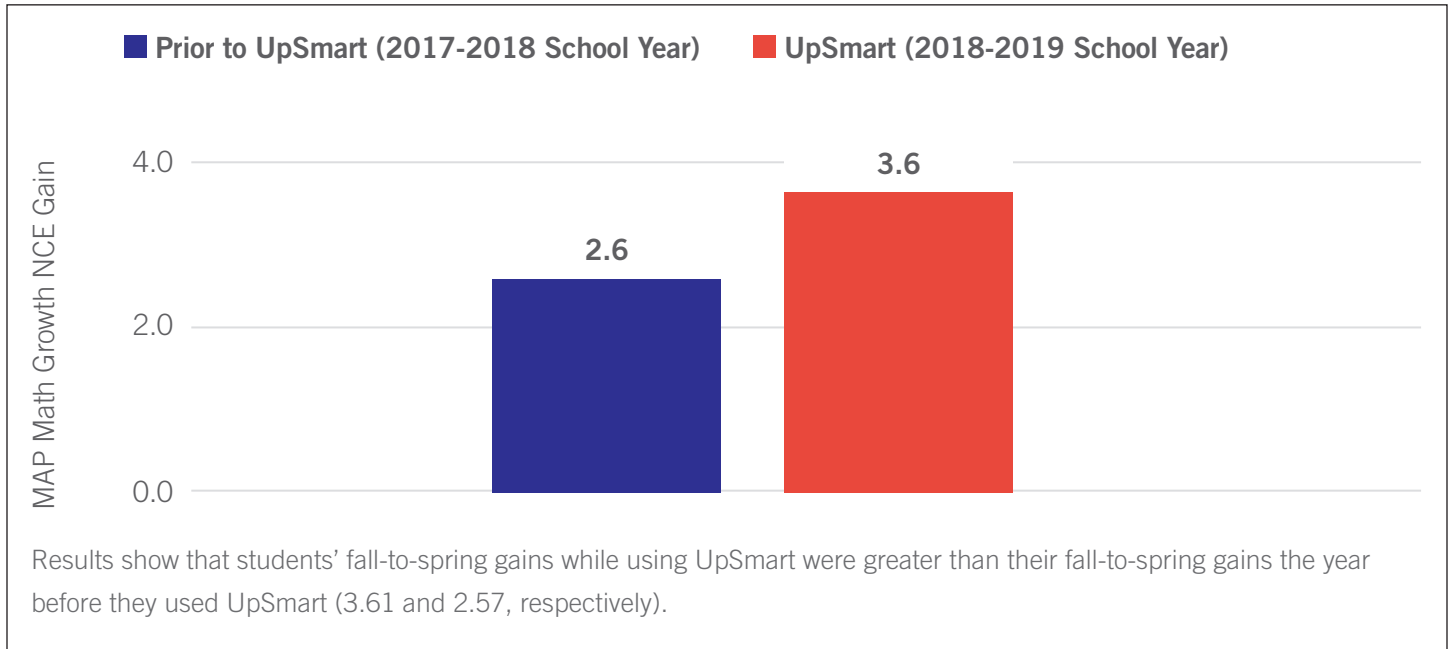


Figure 2. Seneca Valley School District, Grade 6

Normal Curve Equivalent Gains on the MAP Growth Math Assessment, 2017–2018 and 2018–2019



Challenge

Located 30 miles north of Pittsburgh, Seneca Valley School District (SVSD) serves 7,245 students in grades K–12. SVSD's mission is to provide academically challenging opportunities to prepare students to be productive and contributing citizens. While the district is generally high-performing, recent standardized test data indicated that middle school students' math scores weren't accelerating as fast as the district had hoped. The district wanted to find an online solution that would help improve students' math achievement.

Solution

SVSD decided to pilot UpSmart with middle school students in the Seneca Valley Cyber Academy of Choice program. While some educators used UpSmart to introduce new mathematics topics to students, other teachers assigned UpSmart after a lesson for additional remediation, practice, and support. Students were expected to use UpSmart in class 40 minutes per week and were given additional time to complete work at home. Teachers examined student performance by monitoring what types of problems the students were getting wrong, resetting levels, and intervening when students were spending too much time without making much progress.

Lessons Learned

Anecdotal and quantitative evidence reveal that UpSmart had a meaningful impact on student learning. The program:

- **Generated impactful results:** Data showed that UpSmart students gained 11.15 math RIT points on the MAP Growth math assessment from fall 2018 to spring 2019, exceeding expected growth of 7.71 points based on 2015 national norms. Results also revealed that UpSmart students' 2018–2019 NCE gains were greater than their 2017–2018 gains (3.61 and 2.57, respectively)—indicating that the program helped bolster student learning.

- **Provided flexible curricula:** With UpSmart, students begin each mathematics topic with a very short, targeted assessment to determine the most suitable level of instruction for the topic. Based on the student's performance on the assessment, he or she is placed into one of three performance levels: bronze (for students who have limited understanding of a topic), silver (for students who have an emerging understanding of a topic and are working toward proficiency), or gold (for students who are ready to tackle the most challenging aspects of a topic). As teacher Matthew Pournaras notes, "The program was not overwhelming. It provided the specific, condensed content based on my individual students' needs."
- **Offered effective scaffolding:** Students have access to contextual hints throughout the program. The first hint is designed to give students further guidance related to what the question is asking. Those students who need ongoing support can ask for additional hints that will guide them toward the first step in completing the task successfully. In addition, students receive immediate explanatory feedback that is individualized for each student, in support of ongoing effort and learning. Pournaras comments, "In a class with 25 students, you can't always answer student questions as quickly as you'd like. The hints and answer-specific feedback in the program gave me peace of mind. It immediately addressed students' questions and it allowed me to follow up in small group sessions."