Research Brief

Village Green Virtual Charter School

PROVIDENCE, RHODE ISLAND

Edgenuity students make significant gains on the NWEA® MAP® Growth™

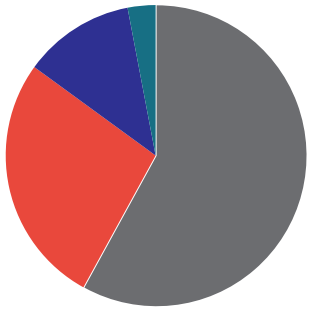
Evaluation Overview

Grades: 10 and 11

Model: Rotational Model

Measure: Northwest Evaluation Association Measures of Academic Progress (NWEA MAP Growth) Reading and Mathematics Tests

District School Demographics



Hispanic	58%
African American	27%
Caucasian	12%
Asian	3%
Low Income	74%

School Overview

Situated in the heart of Providence, Village Green Virtual Charter School (VGVCS) is the first public blended learning high school in Rhode Island. Due to a state-wide enrollment policy, any high school student in the state can apply through a lottery system. As such, the school serves a diverse mix of students. Of the 230 high school students enrolled during the 2014–2015 school year, 58 percent were Hispanic, 27 percent were African American, 12 percent were Caucasian, and 3 percent were Asian. Approximately, 74 percent were eligible for free or reduced-price lunch.

Implementation

In fall 2013, VGVCS opened its doors with a mission of providing students with a more personalized learning experience through greater access to technology, strategic data use, and one-on-one support. Students at VGVCS spend their days on campus from 8:45 a.m. to 3:15 p.m. Students rotate between online learning for concept instruction and face-to-face learning for additional practice, remediation, and support. Sixty percent of the time is spent using Edgenuity's courses in a computer lab, and the remaining time is spent in teacher-led workshops. While in the computer lab, highly qualified teachers circulate throughout the room answering questions, reviewing student work, and providing individualized coaching. Teachers also review and use data from Edgenuity's learning management system to group students and to make instructional decisions.

Study Sample

This report focuses on VGVCS 10th and 11th grade students who used Edgenuity courses during the 2014–2015 school year. Of these students, 44 percent were Hispanic, 27 percent were African American, and 29 percent were Caucasian. Approximately 74 percent were eligible for free or reduced-price lunch. The sample for this analysis comprises 74 students who took the fall 2014 and spring 2015 NWEA MAP Growth Reading test and 83 students who took the fall 2014 and spring 2015 NWEA MAP Growth Mathematics test.

Measures

Edgenuity Program Data

Edgenuity's Web Administrator tracks student engagement, achievement, and progress. This study collected data on the total number of attempted courses, the average percentage of courses completed, and the average overall grade.

Northwest Evaluation Association Measures of Academic Progress

The NWEA MAP Growth Reading and Mathematics tests are Common Core-aligned, computer-adaptive assessments administered to students in grades 3 to 12. If a student answers correctly, the next question is more difficult; if a student answers incorrectly, the following item is easier. Each NWEA MAP Growth assessment uses the Rasch (RIT) unit, an equal interval scale score, to measure student growth and determine student mastery of various defined skills within disciplines. NWEA MAP Growth Reading and Mathematics data were collected and analyzed for 10th and 11th grade students who used Edgenuity courses during the 2014–2015 school year.

Results

Course usage data was collected and analyzed for the 74 VGVCS students who took an Edgenuity English language arts course and took the fall 2014 and spring 2015 NWEA MAP Growth Reading test. Likewise, course usage data was collected and analyzed for the 83 VGVS students who took an Edgenuity mathematics course and also took the fall 2014 and spring 2015 NWEA MAP Growth Mathematics test. Figure 1 provides descriptive data on program use. Overall, students enrolled in Edgenuity mathematics courses completed 69 percent of activities and earned an average overall grade of 81 percent. Students enrolled in Edgenuity English language courses completed 82 percent of activities and earned an average overall grade of 84 percent.

After one year, students improved their reading and mathematics skills. As Figure 2 shows, on the NWEA MAP Growth Reading test, students in each grade made gains in their reading scores from fall 2014 to spring 2015. In addition, results showed that Edgenuity students demonstrated significant improvements in their mathematics abilities (see Figure 3), with 11th grade students making the largest gains.

Conclusion

In conclusion, VGVCS students enrolled in Edgenuity demonstrated gains in reading and mathematics on the NWEA MAP Growth assessments from fall 2014 to spring 2015. These findings provide preliminary evidence that Edgenuity can have a positive impact on students' academic achievement.

Figure 1: Village Green Virtual Charter School Edgenuity Students, Grades 10–11 (N = 90)

Edgenuity Course Usage Data 2014-2015

Subject	Number of Students	Average Overall Course Grade	Average Percent of Completed Courses	Average Number of Days in Course
Language Arts	82	83.6	81.8	145.2
Mathematics	88	81.2	68.5	144.6
All	**90**	**83.7**	**78.4**	**135.6**

Figure 2. Village Green Virtual Charter School Edgenuity Students, Grades 10–11 (N = 74)

Performance on the NWEA MAP Growth Reading Assessment

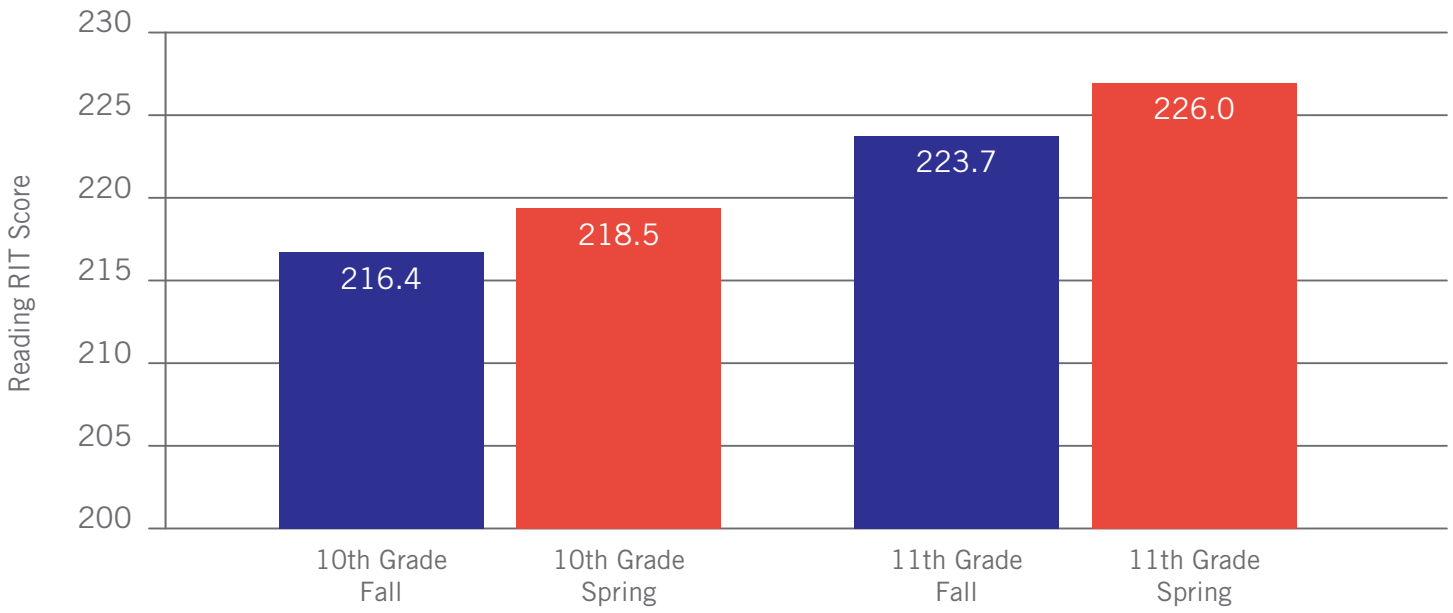


Figure 3. Village Green Virtual Charter School Edgenuity Students, Grades 10–11 (N = 83)

Performance on the NWEA MAP Growth Mathematics Assessment