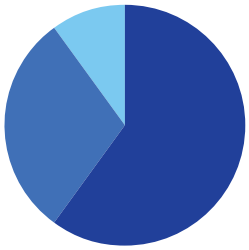
imagine edgenuity

Imagine Edgenuity Students Achieve Significant Gains and Reduce Achievement Gaps on NWEA® MAP® Growth™ Assessment

EVALUATION OVERVIEW

Grades: 6–12
Model: Rotational Model
Measure: Northwest Evaluation Association Measures of Academic Progress (NWEA MAP) Reading, Math, and Language Usage

DISTRICT DEMOGRAPHICS



Alaska Native	60%
Caucasian	30%
Other	10%
Low Income	70%

DISTRICT OVERVIEW

Nestled around the Wrangell–St. Elias National Park, the Copper River School District (CRSD) is one of the most rural school districts in Alaska. Located four hours east of Anchorage, the K–12 district spans 24,663 square miles and is home to 450 students in three combined-grade-level schools. The only way to access the region is through the Alaska Highway System, which is usually covered in ice due to subzero temperatures for much of the year.

For years, educators in CRSD have used a broad array of digital learning tools to assist in their teaching. These efforts have been so successful that in 2013, the district began researching digital curricula that could be offered across the district. CRSD wanted to find a digital online content provider that could be used as a reliable, functional curriculum and would meet the needs of a diverse student body. CRSD examined a number of different digital tools and selected Imagine Edgenuity because of its full alignment with the Common Core State Standards and Alaska Content and Performance Standards, and its unique scaffolding and supports for students (i.e. video, transcripts, audio support, online assessments, interactive note-taking tools, online glossaries, vocabulary support, text-to-speech, and writing tools).

IMPLEMENTATION

In fall 2013, the district implemented Imagine Edgenuity as a curriculum resource with middle and high school students. Middle school students used courses over three 50-minute class periods; high school students used Imagine Edgenuity courses over two 60-minute class periods.

There are two components to the instructional model, most often used in a rotation model:

- Whole group introduction: Teachers first conduct a warm-up activity, preview new content material, or introduce a metacognitive or cognitive learning strategy. Teachers then project Imagine Edgenuity's direct instructional video to the entire class and summarize what was taught and ask students questions to determine whether students have mastered content material.
- Small group rotations: Students then break into two groups. While one group is working with the teacher to reinforce or practice skills, the other is completing Imagine Edgenuity online assignments and quizzes independently. Teachers use data from Imagine Edgenuity's learning management system to continually monitor student progress and address individual students' needs.

STUDY SAMPLE

A total of 203 middle and high school students participating in Imagine Edgenuity courses during the 2013–2014 school year make up the sample in this report. Of the 3,337 courses taken, 43 percent were in English language arts, 33 percent were in social studies, 21 percent were in mathematics, and the remaining 3 percent were in a science or elective course.

MEASURES

Imagine Edgenuity Program Data

Imagine 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

Developed by the Northwest Evaluation Association (NWEA), the Measures of Academic Progress (MAP) Reading, Language Usage, and Mathematics tests are Common Core–aligned, computer-adaptive assessments administered to students in grades 3–12. If a student answers correctly, the next question is more difficult; if a student answers incorrectly, the follow-up item is easier. Tests are typically administered three times a year. Each MAP 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.

In 2011, the Northwest Evaluation Association conducted a study describing how more than 5.1 million students in grades K–11 performed on the NWEA assessments at three different time points during the year. By testing students who had the same characteristics as the U.S. school population, the study provided grade-specific, rank-ordered distributions of performance. This information can be used to determine how a single student, a school, or an entire district's performance or growth compares to a much larger group—a norm sample.

RESULTS

Participation Level

Course usage data were examined for 203 CRSD students who used Imagine Edgenuity courses during the 2013–2014 school year. As Table 1 and Table 2 show, the average overall grade and course completion varied by grade and subject. Overall, students completed 80 percent of their Imagine Edgenuity courses.

Table 1. Copper River School District Imagine Edgenuity Students, Grades 6–12 (N = 203)
Imagine Edgenuity Course Usage Data 2013–2014

Grade Level	Number of Unique Students	Total Number of Courses	Average Percent of Course Completed	Average Overall Grade
6th	32	807	77%	73%
7th	27	777	82%	67%
8th	24	642	78%	68%
9th	36	495	86%	78%
10th	23	247	86%	80%
11th	31	206	77%	80%
12th	30	163	77%	81%
All Courses	**203**	**3,337**	**80%**	**73%**

Table 2. Copper River School District Imagine Edgenuity Students, Grades 6–12 (N = 203)
Imagine Edgenuity Course Usage Data 2013–2014

Subject	Total Number of Courses	Average Percent of Course Completed	Average Overall Grade	Average Number Of Days Between First & Last Grade
English/Literature	1,446	78%	75%	30
Math	704	79%	66%	24
Social Studies	1,103	84%	73%	27
Science	15	100%	77%	124
Electives	69	94%	85%	114
All Courses	**3,337**	**80%**	**73%**	**30**

NORTHWEST EVALUATION ASSOCIATION MEASURES OF ACADEMIC PROGRESS

Tables 3, 4, and 5 show the average RIT scores achieved by Imagine Edgenuity students on the fall 2013, winter 2014, and spring 2014 administrations of the NWEA MAP Reading, Language Usage, and Mathematics tests. The three tables also show how the grade level performance of Imagine Edgenuity students on the NWEA MAP tests compared to their peers in the national norm group.

Results show that Imagine Edgenuity students exhibited significant gains on the NWEA MAP Reading assessment (Table 3). On average, Imagine Edgenuity students improved from a fall RIT score of 217.2 to a spring RIT score of 223.3, resulting in a significant gain of 6.1 points (an effect size of 0.64). When results were broken down by grade, dependent t-tests revealed that 6th, 8th, and 9th grade students achieved significant fall-to-spring RIT gains (12.3, 8.6, and 4.0, respectively). Students also reduced some of the achievement gap that existed between themselves and the national norm. In fall 2013, 6th, 7th, and 8th grade Imagine Edgenuity students were performing 11.6, 8.0, and 8.9 points, respectively, below the national norm. By spring 2014, the gap with the national norm was reduced by 8.1 points for 6th graders, 1 point for 7th graders, and 5.5 points for 8th graders.

Analyses reveal that Imagine Edgenuity students who took the NWEA MAP Mathematics assessment improved their scores from fall 2013 to spring 2014 (Table 4). Overall, Imagine Edgenuity students achieved a significant gain of 6.2 points (an effect size of 0.66). These improvements were maintained when the data were disaggregated, with 6th, 7th, 8th, and 9th graders significantly gaining 8.7, 8.4, 8.4, and 4.8 points, respectively. Perhaps more notably, while 7th grade students were performing 2.8 points below the national norm in fall 2013, by spring 2014 they were performing above it.

As Table 5 shows, Imagine Edgenuity students evidenced a statistically significant gain of 3.9 points on the NWEA MAP Language Usage assessment (an effect size of .50). Students in the 8th grade mad e the largest improvement, demonstrating gains of 6.6 points. Consistent with the NWEA MAP Reading and Mathematics results, after one year of Imagine Edgenuity courses, students reduced some of the achievement gap that existed between themselves and the national norm. While 6th, 7th, and 8th graders were performing 5.4, 5.1, and 6.6 points, respectively, below the national norm on the fall 2013 test, by spring 2014, the gap with the national norm was reduced by 3.4, 0.8, and 3.5 points, respectively.

Table 3. Copper River School District Imagine Edgenuity Students, Grades 6–11 (N = 130)
Performance on the NWEA MAP Reading Assessment, Fall 2013 to Spring 2014

Grade	N	Fall RIT 2013 (Percentile Rank	Winter RIT 2014	Spring RIT 2014 (Percentile Rank)	RIT Gain (*p<.05)	Points Below National Norm at Fall	Points Below National Norm at Fall	Gap to National Norm Reduced by...
6th	24	200.7 (22nd)	212.0	212.9 (41st)	12.3*	11.6 pts	3.5 pts	8.1 pts
7th	18	208.3 (29th)	212.6	212.7 (32nd)	4.3	8.0 pts	7.0 pts	1.0 pts
8th	23	210.4 (28th)	218.2	219.0 (42nd)	8.6*	8.9 pts	3.4 pts	5.5 pts
9th	29	225.8 (62nd)	229.7	229.8 (67th)	4.0*	Already performing above national norm		
10th	15	228.1 (63rd)	228.3	230.7 (67th)	2.7	Already performing above national norm		
11th	21	231.2 (68th)	232.8	234.5)(74th)	3.3	Already performing above national norm		
All Imagine Edgenuity	**130**	**217.2**	**222.4**	**223.3**	**6.1* (d=.64)**			

Note: Dependent t-tests revealed gains were statistically significant at ($p \leq 0.05$).

Table 4. Copper River School District Imagine Edgenuity Students, Grades 6–11 (N = 126)
Performance on NWEA MAP Mathematics Test, 2013 to 2014

Grade	N	Fall RIT 2013 (Percentile Rank	Winter RIT 2014	Spring RIT 2014 (Percentile Rank)	RIT Gain (*p<.05)	Points Below National Norm at Fall	Points Below National Norm at Spring	Gap to National Norm Reduced by...
6th	24	214.6 (38th)	220.3	223.3 (45th)	8.7*	5.0 pts	2.3 pts	2.7 pts
7th	18	222.8 (44th)	226.8	231.2 (52nd)	8.4*	2.8 pts	Now performing above norm	
8th	22	225.7 (40th)	231.6	234.1 (50th)	8.4*	4.5 pts	0.4 pts	4.1 pts
9th	26	241.4 (67th)	243.5	246.3 (71st)	4.8*	Already performing above national norm		
10th	18	238.8 (60th)	242.9	243.2 (64th)	4.4	Already performing above national norm		
11th	18	250.1 (76th)	251.5	251.8 (75th)	1.8	Already performing above national norm		
All Imagine Edgenuity	**126**	**231.8**	**235.7**	**238.0**	**6.2* (d=.66)**			

Note: Dependent t-tests revealed gains were statistically significant at ($p \leq 0.05$).

Table 5. Copper River School District Imagine Edgenuity Students, Grades 6–11 (N = 127)
Performance on NWEA MAP Language Usage Test, 2013 to 2014

Grade	N	Fall RIT 2013	Winter RIT 2014	Spring RIT 2014	RIT Gain (*p<.05)	Points Below National Norm at Fall	Points Below National Norm at Spring	Gap to National Norm Reduced by...
6th	24	206.9 (34th)	212.8	214.2 (44th)	7.3*	5.4 pts	2.0 pts	3.4 pts
7th	18	210.7 (36th)	214.8	214.4 (37th)	3.8*	5.1 pts	4.3 pts	0.8 pts
8th	22	212.1 (31st)	216.8	218.2 (41st)	6.0*	6.6 pts	3.1 pts	3.5 pts
9th	27	224.4 (61st)	227.4	227.5 (67th)	3.1*	Already performing above national norm		
10th	15	226.9 (65th)	227.6	226.5 (61st)	-0.4	Already performing above national norm		
11th	21	229.6 (70th)	229.6	231.6 (71st)	2.0	Already performing above national norm		
All Imagine Edgenuity	**127**	**218.2**	**221.0**	**222.1**	**3.9* (d=.50)**			

Note: Dependent t-tests revealed gains were statistically significant at ($p \leq 0.05$).

CONCLUSION

In conclusion, results from this study provide evidence that CRSD students enrolled in Imagine Edgenuity courses made significant improvements in their reading, mathematics, and language skills, as measured by the NWEA MAP tests. Findings also show that after using Imagine Edgenuity for a year, students reduced the achievement gap that existed between themselves and the national norm on the Reading, Mathematics, and Language Usage RIT scales. On the NWEA Mathematics test, for example, 7th grade students were performing 2.8 points below the national norm in fall 2013. By spring 2014, however, the 7th graders were performing above it. This preliminary research suggests that Imagine Edgenuity is having a positive impact on student achievement.