

# Research Brief

## Claude Elementary School

CLAUDE INDEPENDENT SCHOOL DISTRICT, TEXAS

### Majority of Elementary School Students Exceed Expected Growth on the NWEA™ MAP® Growth™ Reading and Math Assessments

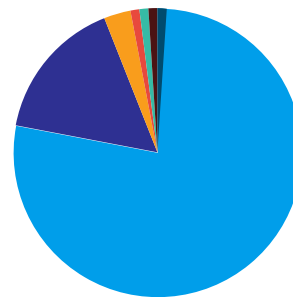
#### Evaluation Overview

**Grades:** K–5

**Model:** Rotational Model

**Measure:** Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP) Growth Reading and Math Assessments

#### Sample Demographics



Caucasian	78%
Hispanic	16%
Two or more races	3%
African American	2%
American Indian/ Alaskan Native	<1%
Hawaiian Native/ Pacific Islander	<1%
Asian	<1%
Free or reduced-price lunch	43%

#### School Overview

Claude Elementary School (CES) is located 30 miles east of Amarillo in the Texas Panhandle. The rural school enrolls approximately 160 students in grades pre-K–5. The school’s population is predominantly Caucasian (78 percent), while most of the remaining students are Hispanic (16 percent) and African American (2 percent). Forty-three percent of students are eligible for free or reduced-price lunch.

Over the years, CES classrooms were becoming larger and more academically diverse. Teachers were struggling to create lesson plans that accelerated all learners’ academic achievement. “Our school was consistently meeting state academic standards and received multiple distinctions,” said Principal Doug Rawlins, “but we found that our lower-performing and higher-performing students’ growth was flatlining. We wanted to make sure that we were accelerating all students’ academic achievement.”

To address this problem, Rawlins examined different blended learning solutions and chose Pathblazer because of its documented record of generating student success. “I had used Pathblazer in several other schools in the past. Data showed that in every single grade level and at every single campus, students who used Pathblazer outperformed those students who did not use the program.”

Rawlins appreciated that the program organized content around individual student needs rather than grade-level content. For example, Pathblazer addresses all five components of literacy—phonemic awareness, phonics, fluency, vocabulary, and comprehension—not just foundational reading skills. He also appreciated how engaging the program was. “Pathblazer truly made learning fun for students. All of a sudden students were motivated and became high-performers.”

## Implementation Overview

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CES teachers implemented the program with students in grades K–5. Teachers established a flex model of blended learning in classrooms and computer labs. Students used the program 60 minutes per day, completing online mathematics folders for 30 minutes in the morning and online reading folders in the afternoon for 30 minutes. At the end of each session, teachers reviewed progress and achievement data in student portfolios. Teachers then grouped students based on the data and conducted mini lessons that provided additional remediation, challenge, or support.

## Study Sample

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Edgenuity examined the impact of Pathblazer on 148 students in grades K–5 who used the program during the 2016–2017 school year.

## Measures

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### Edgenuity Program Data

Edgenuity Pathblazer tracks a wide array of student progress, engagement, and achievement data. This study collected data on the total number of students, the total number of activities completed in each learning path, and the average time spent per student. Students were expected to complete a minimum of four to six activities per week in each subject.

### Northwest Evaluation Association Measures of Academic Progress Growth

Developed by the Northwest Evaluation Association (NWEA), the Measures of Academic Progress (MAP) Growth Reading, Language Usage, and Mathematics tests are Common Core–aligned, computer-adaptive assessments administered to students in grades K–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 unit (RIT), an equal interval scale score, to measure student growth and determine student mastery of various defined skills within disciplines, which inform individualized learning paths in Edgenuity Pathblazer.

In 2015, the NWEA 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 normative sample.

## Results

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### Software Usage

Pathblazer usage data were collected for 148 students who completed at least one online reading activity and 147 students who completed at least one math activity during the 2016–2017 school year. Results showed that on average, students spent 2.3 hours per week (approximately 30 minutes per subject per day) working in Pathblazer, completing an average of 7.8 reading and 5.6 math activities per week with an average activity score of 83 percent in reading and 71 percent in math (Figure 1).

**Figure 1. Claude Elementary School Edgenuity Pathblazer Students, Grades K–5**

Edgenuity Pathblazer Online Reading and Math Activity Data, Fall 2016 to Spring 2017

Subject	Number of Students	Average Minutes per Week per Student	Average Activities per Week per Student	Average Activity Score
Reading	148	140	7.8	83%
Math	147	141	5.6	71%

## Northwest Evaluation Association Measures of Academic Progress Growth

To measure changes in student achievement, NWEA MAP Growth data were obtained from 123 CES reading students and 121 CES math students who used Edgenuity Pathblazer during the 2016–2017 school year. Findings show that Edgenuity Pathblazer students demonstrated significant gains on both the NWEA MAP Growth Reading and Math assessments. In addition, data show that from 2016 to 2017, kindergarten, 1st- and 4th-grade Pathblazer students achieved an average RIT gain on the NWEA MAP Growth Reading assessment 2.8, 6.2 and 2.3 points higher than the national norm, respectively. Data also show that 62 percent of CES students met or exceeded growth on the NWEA Reading assessment.

**Figure 2: Claude Elementary School Edgenuity Pathblazer Students, Grades K–5**

Performance on the NWEA MAP Growth Reading Assessment, Fall 2016 to Spring 2017

Grade	Number of Students	Fall 2016 RIT	Spring 2017 RIT	RIT Gain (*p<0.05)	Expected RIT Gain (National Norm)	% Students Met or Exceeded Norm
K	22	142.4	164.2	21.9*	19.1	64%
1	20	164.2	187.1	23.0*	16.8	75%
2	17	173.2	186.9	13.7*	14.0	39%
3	20	187.8	194.9	7.1*	10.3	52%
4	22	204.3	214.4	10.1*	7.8	79%
5	22	211.5	217.2	5.7*	6.1	55%
<b>All Students</b>	<b>123</b>	<b>181.0</b>	<b>194.50</b>	<b>13.5*</b>	—	<b>62%</b>

**Figure 3: Claude Elementary School Edgenuity Pathblazer Students, Grades K–5**

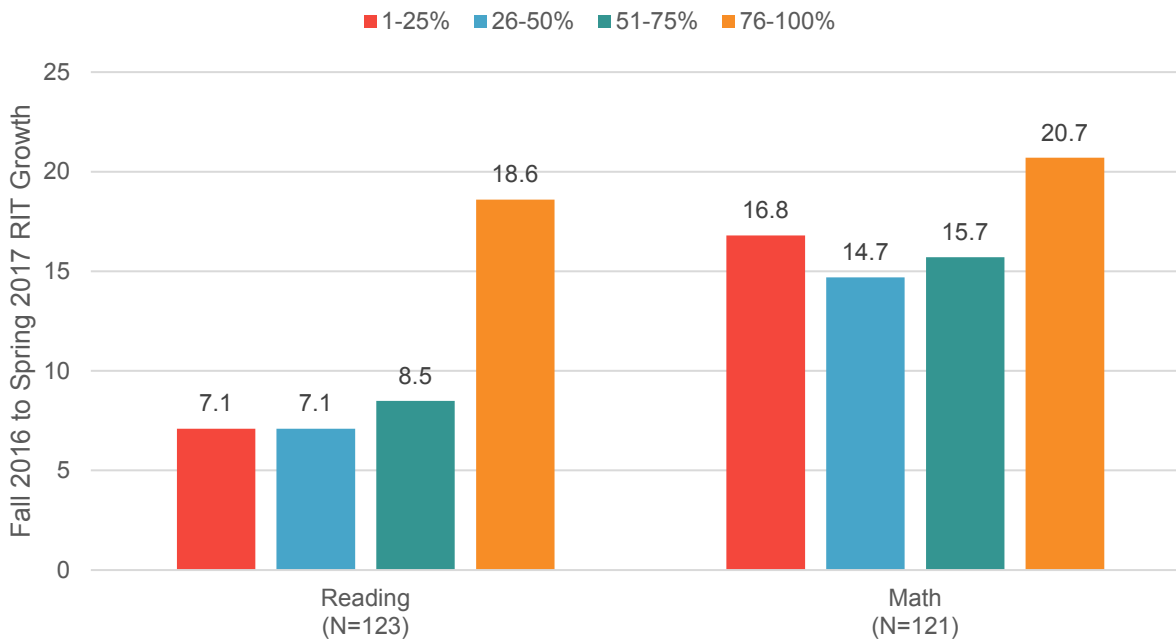
Performance on the NWEA MAP Growth Math Assessment, Fall 2016 to Spring 2017

Grade	Number of Students	Fall 2016 RIT	Spring 2017 RIT	RIT Gain (*p<0.05)	Expected RIT Gain (National Norm)	% Students Met or Exceeded Norm
K	22	140.6	165.5	24.6*	19.1	82%
1	20	166.0	188.4	22.5*	18.4	83%
2	17	174.2	191.8	17.6*	15.2	61%
3	20	194.0	206.9	12.9*	13.0	61%
4	21	204.5	220.1	15.6*	11.6	70%
5	21	218.3	229.8	11.5*	9.9	64%
<b>All Students</b>	<b>121</b>	<b>182.9</b>	<b>200.4</b>	<b>17.6*</b>	—	<b>70%</b>

Data also show that there was a significant relationship between the percentage of Pathblazer folders completed and gains on the NWEA MAP Growth assessments. In reading, students who completed more than 75 percent of folders had gains that were 11.5 points higher than students who completed fewer than 25 percent of work in folders. Similarly, students who completed more than 75 percent of math folders scored 3.9 points higher than students who completed less than 25 percent of work in folders.

**Figure 4: Claude Elementary School Edgenuity Pathblazer Students, Grades K–5**

Average Growth on the NWEA MAP Growth Reading & Math Assessments, by Percentage of Activities Completed, Fall 2016 to Spring 2017



Number of Students per Subject	1-25%	26-50%	51-75%	76-100%
Reading	8	26	20	69
Math	4	24	40	53

## Conclusion

Results from this preliminary study indicate that students benefitted from participation in online Edgenuity Pathblazer activities. During the 2016–2017 school year, CES students using Pathblazer mastered content, earning an average of 76 percent on activities in the program.

Overall, students grew significantly on the NWEA MAP Growth assessments from Fall 2016 to Spring 2017, and an average of nearly 14 points in Reading and nearly 18 points in Math. Findings show that students who completed more than 75 percent of their assigned folders typically demonstrated greater growth than students who completed fewer activities.

Moreover, 62 percent of CES students met or exceeded national normative growth in Reading and 70 percent met or exceeded national normative growth in Math.