

## TRANSFORMING MATH PROFICIENCY AND MINDSETS IN BETHEL PUBLIC SCHOOLS

## Case Study

### **DISTRICT PROFILE**

Enrollment: 3,250 Math Proficiency: 48% Free or Reduced Lunch: 32% Population Density: Sparse Suburban



Danielle Legnard

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### **DISTRICT OVERVIEW**

Bethel Public Schools is a growing suburban school district in Bethel, CT, committed to enhancing educational outcomes for its diverse student population.

### CHALLENGE

Bethel Public Schools faced rising enrollment, a growing number of students needing specialized services, and an increase in those qualifying for free and reduced lunch; a trend that mirrors statewide shifts. Bethel identified a need to improve math proficiency scores and build a positive math mindset among students.

### RESULTS

The use of Exemplars *Problem Solving for the 21st Century* led to significant improvements in student math proficiency scores and cultivated a classroom culture of problem solving and confidence. Students demonstrated increased cognitive engagement and a willingness to tackle challenging problems. By the spring, 94% of students were proficient on the Exemplars Assessment Rubric.

# 9

We have a theme that we keep saying- Little minds can think about big ideas! We really do believe this in Bethel, and the data is starting to show it! Danielle Legnard Math Instructional Coach

### THE CHALLENGE

Bethel Public Schools faced the dual challenge of increasing enrollment and a rising number of students requiring specialized services, including those eligible for free and reduced lunch (30.9%). The district needed to elevate math proficiency scores and develop a constructive math mindset among students. The existing approach was insufficient to meet the evolving educational needs and aspirations of their diverse student population.

### CHOOSING EXEMPLARS

In search of an effective solution, Bethel Public Schools turned to Exemplars, *Problem Solving for the 21<sup>st</sup> Century*, a program offering rich problem-solving tasks aligned with state standards and Mathematical Practices, designed to foster rigor and relevance in math education. The district chose Exemplars because of its alignment with the *Bridges* curriculum and its potential to simultaneously engage students cognitively and improve proficiency rates.

66

"We have a lot of resources at our fingertips ... However, Exemplars tasks are the perfect mix of state standards, Math Practice Standards, rigor, relevance, and problem solving rolled into one."

– Danielle Legnard

As the district integrated Exemplars into its curriculum, students began to embrace problem-solving tasks, showing increased enthusiasm and confidence in tackling challenging math problems.

### THE RESULTS

The implementation of Exemplars yielded remarkable results. Student math proficiency scores saw a notable increase; North West Evaluation Association (NWEA) Spring 2023 data showed that 52% of Grade 2 students met the 61st percentile. By Spring 2024, this figure rose to 68% for Grade 3 students. One standout student success story is that of "CJ," who progressed from the 14th percentile in Fall 2022 to the 78th percentile by Spring 2024.

#### 66

"CJ's story is a success story. Not only did he build his confidence over the course of the fall/winter, but he actually made astonishing progress on the NWEA." – Danielle Legnard

Additionally, students showed phenomenal growth in problem-solving skills as measured by the Exemplars Assessment Rubric, which measures proficiency on the NCTM Mathematical Process Standards. In the fall of 2024, 19% of students met or exceeded proficiency. When they were reassessed in the spring of 2025, an astounding 94% of students met or exceeded proficiency.

The district also observed a positive shift in students' mindsets, with increased cognitive engagement and a willingness to solve challenging tasks. "Our students CAN solve challenging tasks, and they actually like the way it feels to think!" Legnard said.

These improvements underscore the impact of the Exemplars program in transforming both math proficiency and student attitudes towards math in Bethel Public Schools.