

AFFORDABLE, ALIGNED, EFFECTIVE: HOW EXEMPLARS SUPPORTS MATH SUCCESS

Case Study

SCHOOL PROFILE

Enrollment: 614

Population Density: Urban-Suburban

School type: Private



Tamara McGuire

Middle School Math Teacher
Tatnall School
Delaware

SCHOOL OVERVIEW

The Tatnall School is a private, college-preparatory day school in Greenville, Delaware, offering a rigorous curriculum and a vibrant community that fosters curiosity, perseverance, and citizenship.

CHALLENGE

Tatnall School faced a pressing challenge: students lacked confidence and stamina in problem solving and struggled to apply mathematical concepts to real-world situations. These issues were compounded by students' varied learning needs and the educational disruptions caused by the COVID-19 pandemic.

RESULTS

Since piloting Exemplars *Problem Solving for the 21st Century*, Tatnall School has observed remarkable improvements. Students have become more confident and independent in their problem-solving abilities. End-of-year assessment scores have shown a positive trend, prompting administrators to purchase a school-wide license for the middle grades.



Quite simply, the time and the money are worth it. For me, it really comes down to what kind of learners do we want? What kind of learners do we need? If we have resources, like Exemplars, that actively, intentionally cultivate that kind of learner, then it is worth the time and the money to use them to their fullest extent.

Tamara McGuire

Middle School Math Teacher

THE CHALLENGE

Before integrating Exemplars into its curriculum, Tatnall School grappled with significant issues in math education. Students were increasingly passive in their learning and struggled to engage with challenging problems. Tamara McGuire noted, "There's passivity and a kind of waiting for the learning to happen instead of engaging with the learning." This decline in active learning was reflected in open-ended sixth-grade math assessments. For many years, students had scored progressively lower, with few attempting more than a handful of the ten problems. "We've been lucky to have even one student score a four or five," McGuire reported.

CHOOSING EXEMPLARS

McGuire sought a more effective instructional approach—one that could re-engage students and build real-world problem-solving skills. Her experience with Exemplars at a previous school offered a promising path forward. McGuire joined the Exemplars Ambassador Program to try the resource in her current classroom with the goal of school-wide implementation. The program helped deepen her teaching practice and apply Exemplars consistently. She used the rich tasks in a variety of ways—introducing them at the start of units, revisiting them in small groups, and ending with individual assessments.

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The number of tasks on any given topic also allows for that scaffolding to independence. ... What I particularly love about it is the emphasis on the communication piece and the multiple ways of communicating your thinking and your answer.” – **Tamara McGuire** ——— ”

To build support for a broader rollout, McGuire compiled binders showcasing her students' Exemplars work to demonstrate clear improvement over time. She then invited school leaders to observe different styles of implementation. One lesson featured an Exemplars task in a group-work setting, using the *Building Thinking Classrooms* framework; another showed students working independently on a task. The final piece of evidence was the students' performance on an end-of-year assessment, which showed significant gains. "This year, we had a fifth of the group score a five or six ... another quarter scored a three or four ... I was excited about that, especially having not implemented everything I wanted to."

THE RESULTS

Since piloting Exemplars, McGuire has seen substantial improvements in her students' willingness to embrace the feeling of productive struggle. Students are now more confident in their problem-solving abilities and can independently approach complex math problems. With students showing significant improvement on end-of-year assessments in the pilot classroom, Tatnall School plans to fully integrate Exemplars into its 6–8 math program next year. McGuire is excited to deepen her use of Exemplars and support other teachers in using the program for extension and differentiation.

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"In my opinion, Exemplars is the perfect thing. It gives [students] the real-world situations. It gives them the plethora of skills and approaches that are viable, logical, and will get them to the right answer.” – **Tamara McGuire** ——— ”