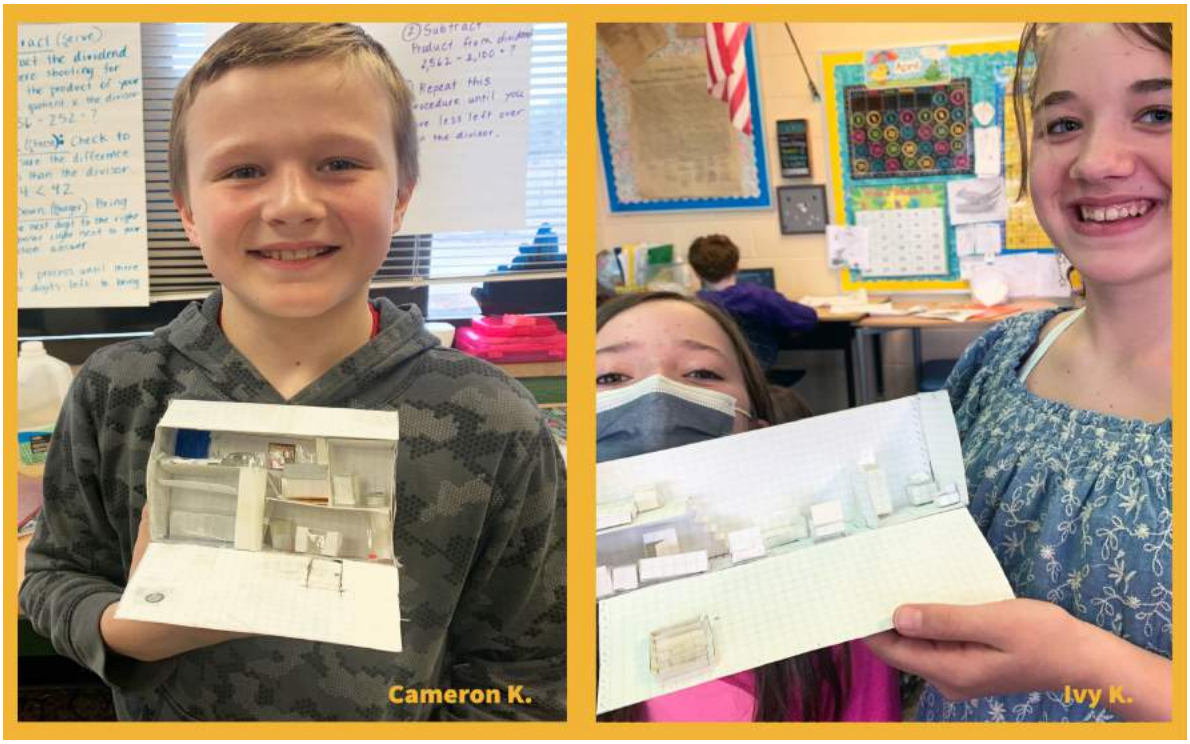
MAKING WAVES AT DCS

Tiny Houses: A Fun, Hands-on Math Project



In May 2021, long-time Creekside teacher Denise Dutcher moved out of her traditional classroom role into a new position providing personalized and competency-based math support for students and teachers. “I work with teachers and students all over the building,” Dutcher says, “supporting those that need math help, as well as providing “extra” math for students needing enrichment.” Students come to her classroom for one-on-one help, but she also facilitates project-based lessons for small groups or even entire classrooms. “I am a resource for teachers to accentuate the learning happening in the classroom,” Dutcher says, “we work together to bring math to life.”

One of these real-life math lessons is a group project entitled Tiny Houses. Students research tiny houses (downsized living spaces with a small floor area), interview a potential client, create a blueprint, then build a to-scale 3D model of their design. Students in several Creekside classrooms (Brown, Brown/Melvin, and Glover/Suppes, Shipley/Breitner) have participated in this project, with amazing results. Through interviews with their client (Dutcher’s daughter, Maddie), students determine the details such as house size, budget, decorating style, features, needs, etc. Their initial blueprint requires students to determine floor area, volume, and surface areas prior to building their 3D model.

This project provides a very authentic experience for students; they tell Dutcher that talking to a grown-up makes them feel like a grown-up working in a real-life situation. And, a group of enterprising students took this project to the next level, designing to-scale furniture for their tiny house. These four sixth-grade girls were so excited about their furniture, they started thinking about how they could use these designs in their school. They chose the Creekside lobby as a potential area needing a furniture upgrade, and designed tables, stools and benches for this location. Creating a design proposal, the girls presented their idea to Creekside Principal Tammy Reich, who agreed the lobby could use some new flexible furniture. Reich granted them funds to work with designer John Carpenter from Dew-El (a Holland, MI company that helps schools create flexible, collaborative learning environments) to furnish the area. Furniture based on these students' designs is being built and will be installed in August.

In addition to Tiny Houses, Creekside students have the opportunity to work on other fun, hands-on math projects with Dutcher, such as creating a new business and designing a dog park. A group of students recently presented their dog park concept to Dexter City Council. So, keep your eye out - we may be seeing the fruits of these student-driven ideas out and about in our community!

Dutcher's impact as a "helper teacher" (as the kids call her) is already showing impressive results. Working to reach all learners on all platforms, Dutcher is helping students achieve mastery in math skills while enjoying the process and applying their learning into awesome projects to benefit their community. "The kids are always excited," Dutcher says. "We're diving deeper into these math concepts, and they don't even realize they are learning because they're having fun doing it."