

THE LIST

EDUCATION COLLABORATION

Firm's partnership builds up STEAM



Children at the STEAM Studio at Gould Evans' Westport office participate in engaging activities that help teach mature concepts in science, technology, engineering, art and math. Some kids learn design principles through arts and crafts. Others learn what a catalyst is by carrying out a pumpkin-carving experiment. Advanced concepts such as learning to code in a simple computer game garners the attention of tech-focused kids. Throughout the learning and fun, the STEAM Studio focuses on reinforcing the concepts and words in the students' minds so they will recognize them when they study those subjects in the future.

ANDREW GRUMKE



As leader of Gould Evans' education practice, David Reid has done a lot of research, trying to stay abreast of progressive teaching practices and how architecture can support those trends.

That became easier a year ago, when a microcosm of a cutting-edge classroom dropped right into his lap – or rather, his architecture firm's office – in the form of STEAM Studio.

The studio, which opened in the fall of 2014 in the Gould Evans mezzanine, is a laboratory of sorts for testing new approaches to education. It allows Gould Evans associates to observe how space affects education, and it lets Mandi Sonnenberg, a Rockhurst University professor and STEAM Studio director and co-founder, experiment with a next-generation classroom.

Reid described the studio space as the "anti-classroom," a loft-like area with an eclectic mix of donated furniture.

"There is nothing about this space that implies what you're supposed to do when you get there other than explore," said Reid, also a Gould Evans principal. "It doesn't say, 'Go find your desk, and wait to be told what to do.'"

STEAM Studio is available for K-12 students, as well as to help teachers with professional development. Sonnenberg estimated that 700 students – from parochial, bilingual and charter schools, as well as homeless shelters and some public schools – already have experienced STEAM Studio.

A design-thinking method of teaching encourages a structured way of developing ideas and gives students more ownership in the learning process. Activities are project-based and open-ended.

For example, elementary students may be given a challenge, such as using certain materials to build a tower strong enough to hold a tennis ball. If they ask questions, teachers and volunteers respond with more questions, try-

ing to prompt critical thinking and risk-taking, Sonnenberg said.

The studio helps open students' minds to STEM fields – science, technology, engineering and math – by adding art to the mix.

"It helps students who may be apprehensive about their skills in STEM to engage," Reid said. "If you shove a STEM problem into an art problem, it's not so overwhelming. It's more inviting."

Down the road, that could give students more confidence when they're trying to decide about career paths.

And when Gould Evans associates help teach, lead workshops or support the enthusiastic activity up in the STEAM Studio, they gain a deeper understanding of what it takes to be a teacher – "and therefore think about ways they could make a teacher's life more sane," Reid said.

STEAM Studio depends on sponsors such as Brightergy LLC, which recently donated a

► CLOSER LOOK

VISIT THE STEAM STUDIO

Visitors can check out STEAM Studio during an open house and fundraiser from 6-8 p.m. Nov. 18. Backers hope to increase visibility for the studio and raise money to buy a bus to transport students.

Open stations in the studio will include a 3-D printer station; Tesla demonstration area; computers for coding and student films; Lego robotics; and a Google SketchUp station.

The event will be at Gould Evans' Westport office, 4041 Mill St., Kansas City.

3-D printer. The company, which seeks to support local STEM awareness and efforts, also helps come up with activities that could work both for the studio and for Brightergy's education program, said Ali Reynolds, Brightergy education program manager.

– Suzanna Stagemeyer