

Colonial engages students, community in STEAM learning



Students from **William Penn High School** demonstrated the spontaneity of chemical reactions using different concentrations. They used color change as evidence of the chemical reactions.

*Editor's Note: This guest post is written by **Colonial School District** Instructional Coaches Jennifer Ashby and Tara Amsterdam.*

From the science of slime to artistic works and music, the 2018 Colonial School District STEAM (Science, Math, Engineering, Arts and Technology) Showcase had something for everyone this year. Teams of students and teachers from all 15 Colonial schools showcased STEAM projects including architecture in the classroom, agriculture from the farm (including the increasingly popular baby goat named Red), arts and even music.

“The goal of the STEAM night is to allow **students** an opportunity to showcase the interactive activities that promote critical thinking, their ability to analyze information and solve complex real world problems that show connections between science, math, engineering, arts, and technology.”, said Kim Mulvena, Colonial School District's instructional science coach.

Each Fall, teachers from across the district gather to discuss and plan for the annual STEAM showcase. Colonial is consistently considering ways to improve the showcase by encouraging building teams to focus on a particular theme. This year's theme centered on complex problem-solving using the engineering process.

Once the theme is decided at the district-wide planning session, schools determine how they will facilitate the learning opportunities in their buildings. Some choose to facilitate STEAM learning during the school

day while others opt to host after-school clubs. By February, students in each school reflect on their STEAM learning experiences throughout the year. After that, each group plans a showcase to highlight and celebrate the learning process, including the experiences they participated in and their learning within the community.

What started as a simple science showcase has grown tremendously for the Colonial S.D. over the years. The evening originally drew a crowd of about 200. As the showcase shifted from teacher-centered to student-facilitated activities, attendance grew. This year's showcase brought in over 1500 people to view more than 100 interactive presentations. Year after year, the night proves to be a community event that brings together the best that Colonial offers.

"Our community leaves this event energized and appreciative of the hard work and preparation our students demonstrate with the support of their teachers. It is a strong investment in our future; these are our future scientists, mathematicians, artists, and engineers all learning about how they can be contributors in an interdependent world!" said Nick Baker, Supervisor of Curriculum & Instruction.