



Santa Clara County Office of Education

NEWS RELEASE

For immediate release
May 11, 2016

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STEAM Engine rolls into SCCOE for a limited time

SAN JOSE, CA – What do you get when you combine science, technology, engineering, arts, and mathematics (STEAM)? A train. Well, for the time being.

[The Santa Clara County Office of Education \(SCCOE\) is showcasing a STEAM Engine in the Learning Multimedia Center at its Ridder Park office, 1290 Ridder Park Drive, through the end of May.](#) The train is a fully integrated, creative sculpture demonstrating science, technology, engineering, arts, mathematics, and their interconnectivity. Originally designed for [the Curriculum & Instruction Steering Committee of the California County Superintendents Educational Services Association Conference](#) in Monterey back in February, and later displayed at [the 2016 Inaugural STEAM Symposium](#) at the SCCOE last month, the STEAM Engine is a traveling display.

Both a whimsical train and an interactive musical sculpture, the STEAM Engine is part xylophone and part oscilloscope. When you strike the xylophone's bars with a mallet, a computer program converts the sound waves into light frequencies creating a colorful projected light display. The engine's cab shows sine waves of the music, transforming the music's art, into its math and science components. The STEAM Engine teaches students about perspective, measurement, and audio frequencies.

After being displayed at Ridder Park, the STEAM Engine's creators — SCCOE Science Coordinator Sandi Yellenberg and Harry Dill, a former NASA scientist and teacher on special assignment at Saratoga Union School District — hope to roll it out to different school sites. This traveling display can morph into "whatever shape is appropriate for the site," Yellenberg says. "This is something we're hoping we can get to our schools and districts."

Dill added the STEAM Engine is an "interactive piece, bringing together all the elements." The sculpture allows for both student and teacher input. The STEAM Engine is a makerspace project, meaning participants also have the ability to view and modify the code to adapt the sculpture. Part of the train's fascination is that it is a "reclaimed sculpture," which represents Santa Clara County industry. The STEAM Engine is locally sourced and created from donated supplies and a few hardware supplies.

As a makerspace, the STEAM Engine is a perpetual work in progress. "It is something that should always be added to and continue to grow," Yellenberg says.

Don't miss out on this unique exhibit! To visit and interact with the STEAM Engine, stop by the Learning Multimedia Center, the library at the [SCCOE](#) now through May 31. The Learning Center is open Monday–Friday 8 a.m. – 5 p.m. And yes, you can make noise in the library.

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