

Town Art and STEM Nonprofits Team Up for Kinetic Sculpture Project **Art and engineering meet as students learn to create sculptures that move**

February 19, 2016

Village Center for the Arts (VCA) and Robotics And Beyond (R&B) have teamed up for an eight-week program where students will bring together art, technology, design, and imagination to create original kinetic sculptures. This is a pilot project in STEAM—science, technology, engineering, art, and mathematics—education for the two non-profit organizations.

The Kinetic Sculpture class explores a unique approach to art and technology. By creating sculptural works using some very basic scientific and technical principles, students will use stored energy from simple machines such as a pendulum, spring, or generate energy from water, wind, or gravity to create motion and animate their sculptures.

The two organizations often talked about collaborating. When VCA executive director Sharon Kaufman approached Paul Chayka, her counterpart at R&B, with hopes of igniting a “sculpture in motion” class, the idea came alive.

Chayka and VCA visiting artist Kathryn Whistler devised a program that provides an overview of aesthetic design, as well as the physics, kinetics, and mathematics involved in the structures and their motion. Students will spend time seeing examples of kinetic sculptures and then learn about what goes into making them. They will also be exposed to topics including visual effects, materials and their properties, and engineering tools that can be used for artistic design. Each student will make his or her own sculpture using a combination of purchased materials, found objects, and moldable clay-like materials formulated by Whistler. The students will also apply the scientific concepts about motion to create moving sculptures.

“Kinetic sculpture is a fun way to introduce students to very basic concepts in physics, as well as the mechanics equations involved their projects,” Chayka explains. The students will see sculptures that incorporate these concepts, and then use this knowledge in their designs. He adds, “I am looking forward to seeing what movements and energy mechanisms the students come up with.”

Chayka and Whistler share a background in ceramics. Chayka is a graduate of the ceramic engineering program at Alfred University, where he received B.S. and M.S. degrees. He spent his career as a materials engineer developing new materials for aerospace, electronics, optical and semiconductor devices. Whistler received her BFA in ceramics from Tulane University. She is currently working on entering a PhD program in clinical psychology.

Both are very excited about this initiative. Whistler notes that there is incredible crossover between STEM and the fine arts. “We are excited to give students the opportunity to challenge themselves both

technically and artistically, creating work that explores the laws of physics while communicating something unique and human.”

The program is open to students ages 12-17, with younger students accepted on a case by case basis. There is a maximum of eight students. It will meet at VCA (12 Main Street) on Mondays, from 4 to 6 p.m. on the following dates: March 7, 14, 28, April 4, 11, 25, and May 2, with May 16 as an extra day for make-up classes. A final exhibit of all the sculptures will be held on May 26.

The cost of the program is only \$360, thanks to a gift from a generous donor, which has helped defray some of the start-up costs. Scholarship assistance is available for New Milford residents through [MVP SOS](#), and both VCA and R&B have scholarship programs.

For more information or to register for this class, call VCA at 860 354 4318.

About Village Center for the Arts

Village Center for the Arts, located on the Green in New Milford, is a nonprofit community fine art center. It provides a vast selection of classes for children and adults, including afterschool Club Mud, and evening courses from oil painting to pottery wheel. The vibrant Summer Camp Creation and school break programs are aided by teenage and adult volunteers. VCA is the creator of Paint The People Festival, held yearly and host to people from all over the world! VCA's mission is to provide a nurturing environment for artistic creativity and development, through educational fine arts programs and events for all ages and levels of skill. For more information about classes and events visit www.villagecenterarts.com.

About Robotics And Beyond

Robotics And Beyond is a New Milford, CT-based not-for-profit educational organization devoted to encouraging and supporting the next generation of STEM technologists, scientists and creative thinkers. It offers courses in STEM topics including engineering, science and design, for students from elementary school through high school. These courses include after-school programs, weekend workshops, robotics league, special events (such as Girls-Only Coding Nights and Minecraft Nights), peer-mentoring programs, and our long-running summer camp.

For more information about programs or to find out how you can help, visit www.roboticsandbeyond.org.