Techno visionaries

Local STEM-Arts program offers youth a chance to soar and explore

Courtesy image. Video depicting interpretation of BP oil spill.

By Dory Hulburt

“It’s got a kick. It’s in your face,” said 15-year-old Maria Elena Martinez. She was describing her video mash-up, which premiered at a public screening Thursday (Sept.9) at Taos Academy, a local charter school serving grades 5-12.

She and fellow students Ron Thomas and Matthew Gonzales participated in a Video Remix/Culture Jamming workshop led by video artist-in-residence Jane Crayton from Boulder, Colo. Their theme was the impact of humans on the environment, focusing on plastic. Students even made the video screen from fused plastic bags.

During the two-week workshop, the students learned to use digital technology like VJ video mixing programs and Flash animation to combine images they shot or procured themselves. Then, they storyboarded their movies, developing a linear, time based sequence.

Martinez’s mash-up opened with peaceful scenes from nature. But gradual interruptions of static indicated all was not well.

“Everyone’s always saying, ‘Aww, nature’s so pretty,’ ” Martinez explained as her video played. She paused, waiting for the words to pop up onscreen, and when they did she echoed: “Yeah, right!”

Images of the British Petroleum logo, oil-covered birds and demonstrators, partiers and their day-after debris and Martinez’s own nephew, rapidly succeeded one another in a visual stream-of-consciousness statement about the consequences of environmental irresponsibility and its repercussions for future generations.

Students will receive dual credit from the University of New Mexico-Taos for the workshop and Martinez already knows that she wants to major in journalism.

Student and videographer Ron Thomas, also 15, described the video mash-ups as “having your voice out in the world without actually speaking.”

He said, “It’s like telling people who you are, what you are, finding out what you want to do and putting it in a video.”

The next step, Crayton told students, was to “take it to the Plaza with a projector and ‘gorilla art’ it.”

They could project their videos on a bare wall, then pack up and disappear, she said. “You’ve created something, made your political statement and got it out there.”

All of her workshops, at elementary schools, universities and museums, incorporate media ethics. “I’m teaching how media impacts our decisions,” she explained. “We need to educate students to do creative, critical action.”

Crayton came to Taos as part of the STEM-Arts project, founded by local artist and curriculum developer Agnes Chávez, who saw it as a way to hire unemployed artists and address funding cuts for arts in education. STEM stands for Science, Technology, Engineering and Mathematics. According to Chávez’ website, stemarts.com, “We provide consulting services to schools and community organizations with the goal of developing art programs which integrate and develop STEM concepts and skills.”

“My work has always been about science and art,” said Chávez. “It’s a passion of mine.”

Based on National Science Education Standards, the science content of STEM-Arts promotes inquiry and exploration rather than memorization and reading. This dovetails with Crayton’s approach, which demystifies technology by encouraging students to dismantle and transform electronic devices and master digital tools.

In a paper on her own website (janedapain.net), titled “Techno-optimism Does Not Breed an Ecological Paradigm,” Crayton discusses how the early promise that technology would free up more leisure time for us has been flip-flopped. Instead, servicing technology demands increasing amounts of our time, in addition to sequestering us from nature.

Chávez and Crayton plan future collaborations.

Crayton would like to bring Circuit Benders to Taos students, in which toys and discarded electronics are “hacked, modified and ‘bent’ (act of random short circuiting)” into musical instruments.

Last year, funded by a small grant from Los Alamos National Laboratory, STEM-Arts brought local installation artist Dienke Nauta and kinetic sculptor Steve Storz into Taos Academy classes for intensive workshops. This year’s project was a partnership between Chávez’ STEM-Arts, the Taos Center for the Arts (which provided the nonprofit funding vehicle), UNM-Taos, the National Hispanic Cultural Center and LANL.

The Regional Development Corporation of Northern New Mexico is investigating possible internships for students using the skills they learn in these workshops and Chávez hopes to bring LANL scientists into the classroom in the future.

Asked whether she had reservations about partnering with a nuclear weapons production facility, Chávez said that, like her efforts to link the arts and sciences, dialogue and collaboration between often polarized institutions and individuals is particularly important at this time.

“The goal of the STEM-Arts project is to bring together interdisciplinary thinkers to work together toward educating our youth in order that they be exposed to diverse views, aesthetics, politics, and ethics, and in the process help them develop their own critical thinking skills and forms of expression,” Chávez said. “I believe it is imperative at this time to have open dialogue between disciplines, and to encourage collaboration between individuals and institutions that are often polarized. I personally love collaborating with diverse thinkers such as scientists, artists and business leaders to solve problems and I think it is an important interpersonal skill for our youth.”

For more information, call 800-803-8073 or visit *www.stemarts.com*.