REGISTER-PAJARONIAN

MESA competition promotes engineers of future



Janet Camacho, Fernando Vaca and Delfino Castañeda, of Alianza Charter School, learn about the properties of dry ice Saturday at the annual MESA Day at UC Santa Cruz.

16 schools compete at annual event at UCSC

By TARMO HANNULA OF THE REGISTER-PAJARONIAN

UC SANTA CRUZ — More than 400 middle and high school students got a dose of university life Saturday during the annual Math Engineering and Science Achievement preliminary competition at UC Santa Cruz. The educationally disadvantaged students, from 16 schools, between the Pajaro Valley and Soledad, competed in the one-day event in a wealth of math and hands-on exercises, said Alexandria Leckliter, MESA director.

As the world economy changes focus from industrial to technological, there is a demand to prepare students to be successful in science, technology, engineering and mathematics. MESA, which is nationally recognized for its academic development programs, engages thousands of students so they excel in math and science and graduate with math-based degrees. MESA partners with all segments of California higher education as well as K-12

For more than 42 years, MESA has a track record of producing math-based graduates by providing classes, hands-on competitions, counseling, transfer support and a community environment to students from middle school through four-year college.

Marcos Arguello, a Watsonville High student, said he competed in the Math Quest in three divisions, advanced algebra/trigonometry, pre-calculus and calculus.

"There's definitely some stiff competition here," he said. "Students do take this seriously.

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This is my first year up here. I think it is a good experience and good exposure for someone my age. It makes you appreciate all the hard work everyone has put into this and you also get to check out the campus."

Most MESA students are the first in their families to attend college. Most are low-income and attend — or have attended — low-performing schools with few resources. MESA serves students in pre-college through the MESA Schools Program, community college students through the MESA Community College Program, and four-year college level students in the MESA Engi-

neering Program

On Saturday, students competed in home-engineered projects such as wood stick crush bridges, sling vehicles, robots, prosthetic arms, balsa wood gliders and egg-drop contraptions. There was also individual math competition and Team Math Quest. By using their homemade prosthetic arms, students were graded on how accurately they could toss a ball and move objects.

Carlos Patino, an instructor at Watsonville High, said he brought about 30 students to the event.

"These kids are our go-getters," Patino said. "If you give them the materials, they just take off. They are in my classroom every Saturday for three hours. This is my ninth year as department chair and I see so much promise in these students."

Patino said he took the torch from his mother, Grace, who taught math for more than 35 years in PVUSD.

"One hundred percent of our MESA students go on to a four-year college or a community college, and then transfer up to the university level," Grace Patino said.

Jose Moreno, an advisor and teacher at Gonzales High School, said he brought 64 students from grades 9-12.

"I brought some sharp students here today," he said. "What I am seeing are students with greater and greater interest in math, science and engineering. With every field trip we get to take, they come back excited and they share that excitement around the campus. It's a great experience to not only be able to the MESA statewide program, compete up here today, but for visit mesa.ucop.edu.

our students to see that this can lead to job opportunities."

MESA is one of the largest programs in the state to support educationally disadvantaged students. It provides academic support and enrichment to more than 20,000 K-12 students and more than 7,800 community college and university students each year.

The California Labor Secretary projects a shortage of 25,000 technical workers by 2016, making programs such as MESA an imperative.

Winners of Saturday's event will move on to compete with students from Santa Barbara and Fresno in the MESA Regionals, which will be held April 5 at UC Santa Cruz.

For more information about



Sun power

Stanford University's solar-powered car was on display Saturday at UC Santa Cruz. The vehicle, once fully charged, can travel up to 50 mph and for several hours.