spokesman for UC College Prep, which oversees the MESA program through the UCSC Educational Partnership Program.

The students come from diverse backgrounds. Many are underprivileged or come from families where their parents didn’t attend college. MESA brings them to college campuses, like UCSC, but also tries to show abstract science and math concepts have everyday applications.

"The nice thing that MESA does, it connects knowledge and applies it," said Rafael Grandaos, executive director of the UCSC Educational Partnership Center. "It also builds a sense of accomplishment."

North Monterey County Middle School student Vickie Alfafara and Atletlie Morales started researching their windmill design in August. The display explaining their project included photos of the smiling seventh-graders flashing peace signs behind their contraption and Saturday they were elated as a string attached to the spinning windmill tugged a car across the floor.

"I like building things," Morales said.

"I've been thinking about being an architect," Alfafara said, followed quickly by Morales' agreement.

"Yeah, me too," her partner said.

North Monterey County High School math and science teacher David Stahl said MESA has helped his students stay on top of their academics and get excited about learning.

"MESA does a good job of introducing everyday science to their lives," he said. "This is showing you can apply principles to the real world."

Saturday's competition was a regional preliminary for schools in Santa Cruz and Monterey counties. Winners will go to a statewide contest, where they can qualify for MESA nationals.