

Construction industry continues to mentor high school students

By **CARLOS RICO**, The Daily Transcript

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A who's who in the San Diego construction, architecture and engineering industries gathered in Mission Valley to acknowledge and see the future of their industry at the seventh annual ACE Mentor Program Awards Banquet Thursday night.

About 135 students from nine San Diego County high schools displayed their year-long design projects, and \$121,500 in scholarship money was given out.

"Our goal is to get students interested in the industry," said Alan Petrasek, chairman of the ACE Mentor Program in San Diego County.

The ACE (architecture, construction, engineering) Mentor Program is a year-long afterschool program that gives high school students an inside look at the industry through construction, architecture and engineering professionals who donate their time.

Mentors teach students what they need to know to put together a presentation on a project they chose to design using the latest building information modeling technology. Students have to not only take into account all the design aspects of a project -- mechanical, electrical, plumbing -- but also factor in cost and scheduling.

Students must meet deadlines in each part of the design process, which is done so that it mirrors what goes on in the construction, architecture and engineering worlds.

This school year, students from Construction Tech Academy, Eastlake, Helix, Hoover, Castle Park, San Dieguito, Southwest, Patrick Henry and San Diego high schools participated in the program.

Construction Tech Academy students developed a project that expands their current campus and conducted a study to determine what the new campus needs.

Students at Eastlake High also chose to renovate and expand their school. Their objective was to create an "ideal" campus that works more efficiently. Features included installation of low-flow water fixtures, which they say could reduce the school's water use from approximately 3.2 million gallons to 1.7 million gallons.

Helix High chose to design a 40-home residential project for families that have a loved one serving in the military. The students said they did so because they felt non-bachelor enlisted quarter housing was needed.

An urban gardening center was drawn up at Hoover High. Plans included an area for farming, booths for a farmers market, classrooms and staff offices. The students also got to renovate a part of their school because of this project.

Castle Park students developed a low-income housing project with LEED certification standards. Students said they decided to go this route because they felt Chula Vista needs additional affordable housing.

An art facility was what San Dieguito High students designed. "The Gallery" is a museum-type of facility that is designed to exhibit student art to the public and their peers.

Southwest High students created an 18-acre community development -- near their school -- that includes housing, an animal shelter, retail space and recreational fields. These students said they wanted to create a self-sustaining project, which is needed in their area.

Students at Patrick Henry designed a new sports complex for their school because they said a new one is needed that includes a gymnasium, Olympic-size swimming pool, a weight room, lockers, kitchen and café.

And San Diego High students chose to remodel their school's science and technology building. The new one would be a three-story structure and have classrooms with labs and teacher space.

Each school team presented their project to mentors, industry leaders, family and friends at the awards banquet -- teaching students about public speaking and making presentations as they would do with a potential client.

Petrasek mentioned that the mentoring program is always looking for volunteers and new mentors for this afterschool program.

"It's not fair for one person to do it year after year," he said. "We need new leaders. New life. New blood ... (The program) is worthwhile when you see the faces of the students as they learn and grow."

Twenty-nine students also received scholarships in denominations of \$1,000; \$1,500; \$2,500; \$5,000; and \$25,000, which all came from donations from various companies and organizations in the industry.

The largest monetary donation came from the NewSchool of Architecture, which handed out two \$25,000 scholarships to senior Emanuel Zumiga-Calderon from Hoover High and senior Daniel Castillo from Southwest.

The NewSchool of Architecture, which has been involved with ACE since the program started in

San Diego, will have its first ACE student graduate next month.

This year is the largest number of schools that have participated in ACE and the most mentors from the industry with 65.

The program was founded in 1994 in New York City and has been in existence in San Diego since 2003.

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