ACE PROGRAM EXCITES STUDENTS WITH HANDS-ON BUILDING

By Audrin B.

It’s not often that high school students are exposed to full-fledged engineering programs. Despite more STEM-focused AP courses developing over the past decade, none have yet to acknowledge the creative, perhaps artistic applications that are intrinsic to the discipline.

The ACE Mentor Program offers students the opportunity to model, calculate, and build a variety of constructs throughout their high school tenure. Designed to grab the attention of students interested in both creative and scientific fields, the after-school program has only recently arrived in Santa Barbara.

ACE, referring to architecture, construction, and engineering, emerged 25 years ago exclusive to east coast institutions in which students could opt in. During the program students are given a brief introduction to the various fields incorporated within, all centered around the concept of establishing a foundation in scientific design before pursuing higher education.

Now 25 years later, the program retains the same sentiment. It was only two years ago that local chapter director Sage Shingle brought Santa Barbara into the fold, offering local students to get a jump into a multitude of engineering specialties.
ACE Mentor Program students at the 2018 Western Region Affiliates event at University of Colorado Denver (Photo credit: Jesse Kuroiwa, College of Architecture and Planning CU Denver)

“I grew up in Santa Barbara but lived in Seattle for nine years,” said Shingle. “Through getting involved with Seattle’s chapter, I moved back to Santa Barbara and decided it’s a worthwhile thing to set up a similar program here.”

The local chapter is still associated with the larger Los Angeles program in that it has no board of directors of its own. Be that as it may, Santa Barbara finds itself in a position to grow as a unique affiliate. The city is small enough for students and mentors to rotate between professional offices so the program functions more as an extra-curricular instead of just another class.

Senior student Eva Kilpper has been involved both years of Santa Barbara’s chapter and acknowledges the unique opportunity for high school students.

“Growing up I always wanted to be an artist, but I was forced to take engineering classes in school,” said Kilpper. “I ended up really liking it, and if the school didn’t add the program I wouldn’t have known at all. It’s cool to see how people can get exposed to ACE to pursue these fields in the future.”
Kilpper recently took part in the 2018 Western Region Affiliates event at University of Colorado Denver. The event, described as a week-long summer camp of sorts, invites those enrolled in ACE to Denver to not only work together in coming up with ideas, but seeing to it that ideas are realized.

“There were 26 students all juniors and seniors.” Said Kilpper. “We had to come up with an idea to solve a problem that they had, where they needed furniture for an outdoor space. In teams, we designed furniture, modeled in on computers, cut plywood out onto CNC machines and made it all in a week. It was a really fun experience.”

As for the local affiliate, Shingle believes that Santa Barbara can offer something that programs elsewhere cannot.

“I kind of stumbled into being able to do something I really like, not knowing where I was going through the whole process. I didn't know of structural engineering when I went off to college, so being able to expose students to at least see that these opportunities are out there is great,” said Shingle.

Learn more about the ACE Mentor Program by visiting their main website here. Fall semester begins with a parent-student kickoff meeting in mid-October. The local affiliate can be contacted directly via infoacela@acementorla.org.

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