

PE MATTERS

STATE
NEWS**NSPE-NV**™ NEVADA SOCIETY OF
PROFESSIONAL ENGINEERS

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State News for NSPE Members

NSPE-NV STEM Outreach Program Making an Impact

“Engineers are almost invisible in elementary schools,” says David James, P.E., F.NSPE, an associate professor at the University of Nevada, Las Vegas who recognized the need for engineers in his home state of Nevada to make their presence felt.

James points to a study by the National Science Foundation that shows a big decline in interest in STEM topics among students from first grade to fifth grade. “This information kind of shocked me because I thought kids would be deciding what they want to do in high school or college,” James says, “but the study showed that kids are self-selecting out of engineering and engineering-related professions in primary school.”

That is why during his term as the Nevada Society president from 2010 to 2012, James took part in several NSPE national outreach events where he saw hands-on engineering activities draw enthusiastic responses from kids and parents.

James wanted to bring these kinds of activities to young people in Nevada so they could see the fun side of engineering.

In 2012, James and other Nevada Society members, volunteering their personal time, secured \$2,000 in start-up funding and in-kind donations to make it happen. The members developed activities and rating sheets and assembled “bucket kits” full of supplies for activities such as building Ping-Pong ball catapults and rubber band cars. In 2013, the group conducted its first trial deployments, which included taking part in a science and technology festival through the Clark County School District.

By 2016, that group of volunteers, which has since become the Nevada PE Foundation STEM Outreach Committee, had reached more than 6,750 K–6 students and received several individual and corporate sponsors, according to committee chair Brook Demitropoulos, P.E.

James says that while they have not had the access to public schools like they thought due to time constraints and teachers’ obligations to prepare students for standardized tests, organizations like Boy Scout troops, Girl Scout troops, and Boys and Girls Clubs have been accessible avenues to introduce the concepts of

engineering to grade school youth.

“The main thing is that we want to make it fun and hands-on,” James says. “It’s fun to put things together and make them work instead of being told to sit in your seat, come up with the right answer or else you get a bad grade. We want these kids to see us engineers as friendly, nurturing, and supportive people as opposed to socially awkward weirdos who do math all day, which I think is the impression a lot of young people get from the media.”

James also says another problem with modern engineering, or at least its perception in popular culture, is that engineers are mostly white males. “We’ve got to get engineering students that are not white males in front of these young people as well,” James says. “In southern Nevada, we are a majority-minority urban area. When I go out with engineering students most of the time, they are Hispanic, Asian, or African American. Kids need to be able to see themselves in these adult engineers, so it isn’t more off-putting.”


Demitropoulos says that by 2018, the committee had reached more than 13,000 students in southern Nevada. They also found volunteers in the ranks of engineers under 40, female professionals—especially mothers with young children—UNLV engineering students, and high school students.

“When we started convening the outreach committee and getting volunteers, a great majority of them were females that we had not seen before—many of them with kids,” James says. “What I realized was that these engineers want to share who they are, not only with their own kids, but with other kids. They saw this is an opportunity that they could believe in and get behind.”

The committee’s current goals are to continually develop, evaluate, and deploy new activities; find a trained cadre of volunteer professionals; and build its network of customers.

Advocacy Campaign a Success—But More Action Needed



 **Trish Hatley** @triciahatley - Aug 7. Met with Senator Inhofe's field rep @BrysonPanas this morning in our @FreeseNichols office to talk about the need to reduce licensure exemptions and how PE's help protect the public health, safety and welfare. [#LicensedPEday](#) [#PEDayAdvocate](#)

More than 100 NSPE members either met with or called their legislators and staffers on August 7 as part of the Society's Professional Engineers Day advocacy campaign. It was the largest such campaign in remembered NSPE history. PEs joined together to speak up for the importance of licensure and passage of a federal bill that would require PE oversight of utility pipelines, following the 2018 Merrimack Valley, Massachusetts, gas line explosion.

NSPE's Manager of Government Relations and Advocacy Stephanie Hamilton called the day "a strong success" as enthusiastic NSPE members worked to build lasting relationships that will help them be seen as experts on licensure and technical matters now and in the future.

However, the week before the campaign, the Senate version of the bill was added as an amendment to a larger pipeline safety bill and watered down to remove the PE requirement. According to Hamilton, the Society was "disappointed" and "dismayed" about this change to the Leonel Rondon Pipeline Safety Act, named after the teenager killed.

It's not too late to make a difference, however. NSPE members are urged to contact their legislators.

Read More

- [PE article on the advocacy campaign](#);
 - [Hamilton's column on the changes to the bill and how members can take action](#);
 - [Popular Mechanics article highlighting the personal impacts of the deadly explosion](#).
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2019 Fall Webinar Series Open for Registration



Register now for the [2019 Fall Webinar Series](#) ! Develop your skills and earn continuing education credits this fall. Stay current on a variety of topics from the comfort of your home or office. Don't miss NSPE Deputy Executive Director and General Counsel Arthur Schwartz's Ethics Forum each month—register for individual webinars or [get a special bundle price](#) until **September 17**.

Sign up now for these webinars:

- [Ethics Forum: Conflicts of Interest - Employers and Clients](#)
September 18
- [Leading Project Teams: Emerging Technologies and Smart Design](#)
September 25
- [Mindfulness in Action](#)
October 2
- [Ethics Forum: Conflicts of Interest - Vendors and Colleagues](#)
October 16
- [Clients are from Venus, Consultants from Mars: A Guide to Effective Management of Consultants](#)
November 6
- [Ethics Forum: Conflicts of Interest - Serving the Public](#)
November 13

And don't forget that, as part of your NSPE membership, you also receive access to [15 free online seminars](#) .

Find Quality Candidates or a Great New Job



NSPE's online event for employers and job seekers will take place again on **October 2** from 11 am – 3 pm Eastern.

Whether you're an engineer just starting out or an experienced professional looking for a new opportunity, you can connect with employers from the comfort of your home, office, smartphone, or tablet. The event is free for job seekers.

Companies in search of top talent will be able to access professionals representing all engineering sectors around the country.

[Employers: Learn more and register.](#)

[Job seekers: Learn more and register.](#)

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