



28 Years of the Supercomputing Challenge

May 2, 2018

As I reflect on my almost four decades of experiences with the Laboratory (I came as a graduate research assistant in 1979), I am proud of what I have had the opportunity to achieve. I'm still doing the same job that I was hired for in 1984, to help the Laboratory scientists use the supercomputers to advance their scientific research. But my work on the Supercomputing Challenge has also been one of the highlights of my career.

In 1990 I was part of a team instructed to create a program to inspire New Mexico students to pursue STEM (Science, Technology, Engineering and Math) and the [Supercomputing Challenge](#) was born as a way to get students interested in using computers to solve problems. Students chose a topic of interest to them and research the topic and create a model or simulation to help understand the problem and to make predictions of possible outcomes given a variety of different inputs or scenarios.

Teamwork, research, computational thinking, oral and written communication and computer programming are some of the skills they develop. At the end of the school year-long Supercomputing Challenge, the teams submit a final written report and present their project and get evaluated by scientists and educators.

After their presentations they take tours of the Laboratory. Some students had never left their local communities nor spent the night in a hotel before participating in the Challenge. One student from Española remarked that Los Alamos "was no longer a mystical hilltop" after participating in the year-end expo and tours.

The Supercomputing Challenge is supported by many volunteers who feel that educating the next generation is very important. We often have over 100 volunteers working the Kickoff Conference in the fall and about the same amount are involved in the year-end activities.

Now, as I look ahead to my retirement, several students taking part this year are second-generation participants; one or both of the students' parents took part in earlier Challenges. It's been a great privilege to help so many young people discover their enthusiasm for computing.

David Kratzer
Program Manager
Supercomputing Challenge

Los Alamos National Laboratory

www.lanl.gov

(505) 667-7000

Los Alamos, NM

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