

## Supercomputing Challenge Summer Teacher Institute

Issue No. 62

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### Program Coordinator

Name David H. Kratzer

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### Program Description:

The Supercomputing Challenge Summer Teacher Institute is a two week long course whose primary goals are to: 1. introduce teachers to complexity science and computational tools and methods, 2. advance teachers' knowledge, understanding, and skills in STEM domains, 3. prepare teachers to support Supercomputing Challenge and/or Project GUTS teams, and 4. provide ongoing support to teachers who will recruit and assist students in STEM endeavors. Secondary goals include forming of networks of support for STEM teachers, raise awareness of the continuity and scaffolding of learning between the Challenge and GUTS, and serving as a model of a coordinated approach to professional development that spans middle and high school informal science programs.

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### Primary Outcomes:

Confident teachers and more participation in the Supercomputing Challenge and Project GUTS.

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### Areas Served:

All New Mexico;

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### Grade Level:

Professional Development;

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### Leading Organization:

Supercomputing Challenge

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### Program Address/Mailstop:

New Mexico Supercomputing Challenge, Inc.  
Post Office Box 30102  
Albuquerque, New Mexico 87190

or  
David Kratzer  
HPC-3 MS T080

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### Number of Individuals Served by the Program per Fiscal Year:

52

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### Year Program Started:

1995

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**Program Partners:**

Los Alamos National Laboratory, Sandia National Laboratories, New Mexico Institute of Mining and Technology

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**Funding received:**

The 2008 STI was funded by a \$120K grant from the New Mexico Public Education Department.

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**Resources/Materials provided to program participants:**

Textbooks and software

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**Other funding sources:**

Los Alamos National Laboratory, Sandia National Laboratories, and several businesses.

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**Program Cost:**

\$120K

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**Other learning objectives:****Best Practices:**

Of course. Comments from evaluations forms:

"Fantastic two weeks, very insightful and meaningful, I look forward to many more years of joining in the summers. "

"Thanks for putting on such a well-organized and fun workshop."

"STI is the best teacher program I have been part of. It is excellent."

Comment about the materials provided:

"More than I expected and truly appreciated. Many of the resources I have gained will help in regular classes as well."

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**How program outcomes are accessed:**

Look at registration numbers for the Supercomputing Challenge and the number Project GUTS clubs.

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**Reporting Requirements:**

Report to PED and participation by PED members in STI activities.

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**Cost per participant:**

\$2.5K

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**Participant Application Process:**

Email [consult@challenge.nm.org](mailto:consult@challenge.nm.org), agree to sponsor team the

following year. There is a "commitment" form on the sti website.

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**Program Recruitment Initiatives:**

We sent invitation emails to several teacher lists. The Challenge will have a table at the Innovate-Educate New Mexico conference in late April. We attend several teacher conferences around the state during the year to promote the Challenge and STI.

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**Targeted Diversity Groups:**

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**Type of Program:**

Teacher/Faculty Professional Development

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**Program Website/URL:**

<http://www.challenge.nm.org/sti>

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**Projected Length of Program:**

Ongoing;

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**Primary funding source:**

Government;

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**Program Evaluation:**

Informal/Internal;

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