



**MAITLAND P. SIMMONS MEMORIAL AWARD SUMMER  
INSTITUTE  
2016**

## **Preparing Elementary Teachers to Implement NGSS**

**Location: Rowan University, Glassboro, NJ**

**Instructors: Linda Smith, Scott Goldthorp**

Twenty-two talented elementary school teachers participated in the five day 2016 Maitland P. Simmons Memorial Award Summer Institute held at the South Jersey Technology Park facility of Rowan University, Glassboro, New Jersey from July 18-22, 2016. This workshop targeted elementary school educators from throughout the state and attracted an interesting mix of professionals who teach Kindergarten through Grade 6 students. Some Elementary Science Specialists were included in the group.



The Summer Institute, entitled "Preparing Elementary Teachers to Implement Next Generation Science Standards (NGSS)", was co-presented by current NJSTA President Scott Goldthorp and NJSTA President-Elect Linda Smith. With their guidance, participants conducted hands-on activities and explored demonstrations that targeted concepts appropriate for elementary grade level students such as building, testing, and redesigning straw rockets; investigating seed dispersal whirligigs; and building marshmallow towers. Throughout the entire Institute, teachers were frequently prompted to consider how each activity could be used with their students and how each exemplified the NGSS.



Linda and Scott arranged lessons to showcase key Science Standards and highlighted the differences between science and engineering content and practices. They are also to be commended for connecting the Scholars with exciting guest speakers including Dr. Tom Custer, of Zula International, who presented science activities at the Institute on Monday. Dr. Christine Anne Royce, author of *Teaching Science Through Tradebooks* (ISBN-13: 978-1936959136, NSTA Press Publisher) modeled a powerful testimony of technology use as she networked with the Simmons Scholars on Tuesday via an interactive online session from her Colorado location. Dr. Royce shared her experiences about the book's development and recommended innovative ways to apply what is contained in the pages to classroom teaching. In addition to receiving a copy of this book, each Simmons Scholar also received a variety of classroom resources from Carolina Biological Supply

Company (Burlington, North Carolina). We are grateful to the efforts of Linda Smith, who was able to procure the Carolina supplies for each participant at no cost to the NJSTA Simmons workshop. Honorable mention also goes to Linda Burroughs who attended the Institute on Monday through Wednesday and shared invaluable expertise through a litany of engaging lessons.

The workshop began each day at 8:30AM and concluded in the afternoon by 4:00PM. A continental breakfast, lunch, and snacks were provided daily. Many of the Scholars chose to collaborate with colleagues during their lunches. During the Institute, the structured activities frequently spilled over into the Rowan University hallways. For example, Scholars used the hallways as launch pads for their Straw Rockets and set up ramps to test rolling objects. One evening, Linda Smith hosted an al fresco dinner at her home. At nightfall, the Simmons Scholars observed the twinkling stars and learned about strategies that can be used to engage their students to foster an appreciation of the sparkling wonders of the night sky. Throughout the

entire week, Scholars were offered many opportunities to work together with colleagues who teach at the same grade level with the goal of preparing lesson units that meet targeted NGSS performance expectations.

Teachers indicated that they gained skills necessary to engage their students and bring practical, hands-on science activities to their teaching. One 2016 Scholar summarized: "At the Maitland P. Simmons Summer Institute we looked at several hands-on engineering and design tasks that are aligned with NGSS . These activities set up a challenge for students to accomplish, and organically guide student inquiry. The teacher does not tell them how to construct their designs; students direct their own explorations. This is what NGSS is about."



George Czergovits and Linda Burroughs



Carol Pletcher sampling Monday's lunch with Gabby Meyer and Kathleen Luliucci waiting patiently



Kathy Ernst and Laura Dunbar



Maggie Kristofick finishes Marshmallow Challenge just in time



Leonard Blessing reading from Maitland Simmons' book

***If you have additional pictures or resources to share from this event, please send them to [NJSTAwebmaster@gmail.com](mailto:NJSTAwebmaster@gmail.com).***