



1-3) Teachers create hands-on experiments and activities for their classrooms with the help of ISE Net Museums; 4) The 2014 Teacher Institute participants

## SUMMER TEACHER INSTITUTE

Science teachers and their students wrestle with energy concepts at nearly every grade level. What is energy? Where does New Mexico's energy come from? Is energy from the sun different from the energy that powers our everyday lives, from our cars to our bodies? The Framework for K–12 Science Education ([National Research Council, 2012](#)) provides a foundation for K–12 teaching and learning about energy as a crosscutting concept across the disciplines. Educators from five NM ISE Net institutions used the Framework to develop and present the first *Energize New Mexico* Teacher Institute, held in Albuquerque on June 9–13, 2014.

In order to facilitate future implementation, teachers attended the Institute as part of a school team that included principals. Twenty-six elementary school teachers from three school districts increased their conceptual understanding of energy and learned strategies for exploring energy with their students. Highlights from the week include the construction of roller coasters and waterwheels, exploration of New Mexico's energy resources, and children's literature connections. The Institute opened the door to ideas merging informal science education with formal, standards-based classroom education, and encouraged teachers to “think outside the box” when it comes to teaching and learning about energy.

Institute participants are supported by NM ISE Net educators throughout the school year, and all participants attended the New Mexico Science Teachers Association conference in Fall 2014.