

Questions were designed to measure knowledge and abilities in physical science, life science, and earth and space sciences.

U.S. students placed below average in math and science. In math, U.S. high schoolers were in the bottom quarter of participating countries.

Only 34 percent of fourth-graders, 30 percent of eighth-graders and 21 percent of 12th-graders performed at or above the proficient level, demonstrating competency on challenging subject matter.

NM Science Standards (grades 9-12)

- Strand I: Scientific Thinking and Practice
 - Standard I: Understand the processes of scientific investigations and use inquiry and scientific ways of observing, experimenting, predicting, and validating to think critically.
- Strand II: The Content of Science
 - Standard I (Physical Science): Understand the structure and properties of matter, the characteristics of energy, and the interactions between matter and energy.
 - Standard II (Life Science): Understand the properties, structures, and processes of living things and the interdependence of living things and their environments.
 - Standard III (Earth and Space Science): Understand the structure of Earth, the solar system, and the universe, the interconnections among them, and the processes and interactions of Earth's systems.
- Strand III: Science and Society
 - Standard I: Understand how scientific discoveries, inventions, practices, and knowledge influence, and are influenced by, individuals and societies.

www.ped.state.nm.us/MathScience/scienceStandards.html

New Mexico Science Foundation Workshops



www.nmsciencefoundation.org
mark@nmsciencefoundation.org
Education Through Observation

NM Science Foundation offers a variety of science, technology, and government workshops. Workshops are offered to schools or organizations on an “as available” basis. Schedule workshops by emailing your request to mark@nmsciencefoundation.org (include contact, number of students, date, time available, and location).

Workshop duration is flexible depending on level of students and time available. Workshops can be broken into basic and advanced sessions.

Visit our website for details on each workshop.

Science

- Scientific Method
- Science Fair projects
- Thinking skills (chess)

Biology

- Hands-on, 13 step AMP replication
- Hands-on DNA extraction
- Hands-on epigenetics expression

Chemistry

- Hydrolysis
- pH
- Periodic table
- Combustion

Physics

- Newton’s Laws
- Sound
- Thermodynamics

Electronics

- Build a motor
- Build a radio
- Learn to solder

Microprocessors (high school only)

- PIC μ controller
- BASIC Stamp
- TI Value Line

Computers

- Eight week summer class
- Hardware orientation
- Intro to Linux

Rocketry

- Cardboard rockets
- Payload recovery
- Multiple engines

Horticulture

- Fertilizers
- Crisis gardening
- Garden bugs

Citizenship

- Let’s vote
- Let’s make a bill
- Let’s judge a crime