

# NSTA Learning Center

<http://learningcenter.nsta.org>

NOTES

## E-Learning and the NSTA Learning Center

The National Science Teachers Association (NSTA) is a member-driven organization of science educators who promote excellence and innovation in science teaching and learning. Research tells us that educators need at least 50 to 80 hours of professional development over the course of the year to make any substantive changes in their teaching practice. The NSTA Learning Center serves as a key online destination for science educators to identify, obtain, and certify professional development using quality NSTA e-learning resources and opportunities. These products can be combined so that teachers can receive hundreds of hours of personalized professional development and participate in our online professional learning community, sharing and discussing strategies and resource collections.

**At the NSTA Learning Center, both members and nonmembers will find:**

**Science Objects:** Free two-hour online interactive science content modules. Ninety-one free Science Objects are available.

**SciPacks:** Ten-hour interactive courses with an e-mail mentor and certification. Twenty-four SciPacks are currently available.

**SciGuides:** Thematically aligned lesson plans, web sites, student work samples, and simulations. Currently, forty-two SciGuides are available.

**Web Seminars:** Ninety-minute live professional development experiences that use online learning tools to interact with leading scientists and education specialists. Web seminars are archived for viewing "on demand." NSTA has reached over 15,000 participants with more than 300 seminars on a host of topics.

**NSTA Symposia, PDIs, and Summer Institutes:** Blended professional development opportunities that begin at NSTA conferences or at key cities across the country during



*continued...*

"... to promote excellence and innovation in science teaching and learning for all."

[www.nsta.org](http://www.nsta.org)

**NSTA** National Science Teachers Association

the summer. Designed to enhance participants' knowledge of both science content and best teaching practices, these offerings are extended by several online follow-up experiences. At the NSTA National Conferences, NSTA has offered face-to-face PD opportunities in partnership with BCBS, CSME, FDA, K-12 Alliance/WestEd, McRel, NIH, NASA, NOAA, Sally Ride Science, the U.S. Forest Service, and NSTA authors.

**Enhanced Podcasts:** 2 to 60 minute segments. Available for immediate download, podcasts are perfect for teachers trying to keep pace with expanding scientific fields.

**NSTA e-Books & Journal Articles:** Publications from the renowned NSTA Press®, including more than a hundred e-books and more than 5,000 journal articles from the four NSTA journals.

**Online Courses:** Fee-based courses from NSTA and leading institutions offering science education online. NSTA's five-week online short courses include live web seminars, online science simulations, graduate credit options, as well as interaction with Ph.D. instructors and experts from the field. Seven courses are now offered as part of NSTA's suite of opportunities.

**SciLinks®:** SciLinks help science educators harness the vast resources of the Internet by connecting key textbook subjects to NSTA-approved web pages that enrich student learning both inside and outside the science classroom. Students can access vetted web pages that provide real-time information and new content on a host of science topics. Since its inception in 2000, more than 234,674 teachers and more than 959,052 students have used SciLinks.

## What Do Teachers Say About the NSTA Learning Center?

Teachers who have become familiar with the Learning Center and have used its various resources have reported that they feel more competent and confident about the science content they are teaching. Only seven percent of teachers purchasing the NSTA SciPack on Force and Motion reported feeling very confident in teaching Force and Motion before completing the corresponding SciPack. After completion of the NSTA SciPack, 60 percent said they felt very confident in teaching the subject, 98 percent found that the SciPack content was relevant to their needs, and 98 percent found interactive simulations worthwhile to their learning. Additionally, 96 percent of those respondents said they would recommend NSTA SciPacks to their colleagues.

Two additional studies conducted by third-party groups found similar significant gains in teacher self-efficacy and science content knowledge across seven different SciPacks with teachers from grades 3-8. In one study that looked at pre/post assessment data, students in the treatment group, whose teachers completed and passed SciPacks as part of their professional development, reported significantly higher gain scores than those students in the control group. For a complete list of testimonials, visit <http://learningcenter.nsta.org/impact>.

## Featured SciPack Science Standards Topics

Teachers can take advantage of over 8,000 e-PD resources and opportunities on a number of topics at the NSTA Learning Center. The Learning Center continues to expand its offerings and tools and to upgrade usability of the site.

- Force and Motion
- Chemical Reactions
- Electric and Magnetic Forces
- Atomic Structure
- Elements, Atoms, and Molecules
- Energy
- Nature of Light
- Earth, Sun, and Moon
- Solar System
- The Universe
- Gravity and Orbits
- Earth's Changing Surface
- Rocks
- Plate Tectonics
- Cell Structure and Function
- Ocean's Effect on Weather and Climate
- Cell Division and Differentiation
- Cells and Chemical Reactions
- Coral Reef Ecosystems
- Resources and Human Impact
- Nutrition
- Science of Food Safety
- Flow of Matter and Energy Ecosystems
- Interdependence of Life

## NSTA Learning Center State/District Partnerships

- Arlington County Public Schools, VA
- Atlanta Public Schools, GA
- East Texas STEM Center Program, TX
- Chicago Public Schools, IL
- Houston Independent School District, TX
- Cincinnati Public Schools, OH
- West Virginia Department of Education, WV
- Fairfax County Public Schools, VA
- Hawaii Department of Education, HI
- Jefferson County Public Schools, TN
- University of Maryland, Baltimore County, MD

Our District Partnership Learning Center model continues to expand with more than 80 unique cohorts of teachers from school districts across the country.