NSTA Learning Center

http://learningcenter.nsta.org

E-Learning and the NSTA Learning Center

The National Science Teachers Association (NSTA) is a member-driven organization of science educators that 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.

At the NSTA LEARNING CENTER, *both* members and nonmembers will find:

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

SciPacks: Ten hour interactive course with an e-mail mentor and certification. Twenty-one SciPacks are currently available.

SciGuides: Thematically aligned lesson plans, web sites, student work samples, and simulations. Currently thirty-seven SciGuides are available.

Web Seminars: Ninety minute live professional development experiences that use online learning to interact with leading scientists and education specialists. Web Seminars are archived for viewing "on demand." NSTA has reached over 10,000 participants with more than 200 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 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 Conference in 2010, NSTA offered face-to-face PD opportunities in partnership with BCBS, CSME, FDA, K-12 Alliance/WestEd, McREL, Sally Ride Science, NOAA, the U.S. Forest Services, and FDA and NSTA authors.

Enhanced Podcasts: Five- to fifteen-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 3,000 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® helps 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, completition of the NSTA SciPack, 60 percent said they felt "very confident" in teaching the subject, 98 percent found 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 through 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/testimonials.aspx*.

NSTA Learning Center State/District Partnerships

- West Virginia Department of Education
- Jefferson County Public Schools, TN
- New Hampshire Department of Education
- Arlington County Public Schools, VA
- Montgomery County Public Schools, MD
- Chicago Public Schools, IL
- Stamford County Public Schools, CT
- Fairfax County Public Schools, VA
- East Texas STEM Center Program, TX
- Central Valley Science Project, California State University, CA
- Texas TRC: University of Texas at Dallas, TX
- Teacher Academy in the Natural Sciences, Mississippi State University, MS
- Texas TRC: University of Texas at Tyler, TX
- Collaborating for Excellence in Middle School Science, CA
- Galveston County Regional Collaborative, TX
- Hawaii Department of Education
- Cincinnati Public Schools, OH
- Jefferson County Public Schools, KY
- LASER Alliance, Mountain to Harbor Alliance, WA
- Oregon Science Teachers Association
- Zero-G Flight Initiative
- Twin Harbors Science Consortium
- Orange County, CA
- New York City Public Schools, NY
- PRISM Grant Program, MT
- University of Maryland, Baltimore County, MD
- Atlanta Public Schools System, Atlanta, GA

Our District Partnership Learning Center model continues to expand with more than 60 unique cohorts of teachers from school districts across the country.

Completed SciPack Science Standards Topics

Explaining Matter with Elements, Atoms, and Molecules

Force and Motion

Chemical Reactions

Electric and Magnetic Forces

Atomic Structure

Energy

Nature of Light

Earth, Sun, and Moon

Solar System

The Universe

Gravity and Orbits

Earth's Changing Surface

Cell Structure and Function

Cell Division and Differentiation

Coral Reef Ecosystems

Resources and Human Impact

Nutrition

Science of Food Safety

Ocean's Effect on Weather and Climate

Rocks

Plate Tectonics

Teachers can take advantage of over 6,000 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.