

Navigator

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A Message from the President

Creating Networks of Leading and Learning

By Linda Atkinson, Ph.D., NSELA President

NSELA members serve as science leaders in a variety of roles, such as, K12 science teachers, school administrators, university professors, scientists, business or industry representatives and community members. In these roles, we are members of professional learning communities and through membership and involvement in NSELA we create a network of school-university-community learning communities, which provides opportunities for us to learn from and support each other. Through these opportunities for professional interaction, there is an excitement and synergy created about learning and leading.



As a professional network, NSELA serves as a conduit for science educators to build their leadership capacity. According to Lieberman, leadership involves learning from and contributing to the learning of others. NSELA as a professional organization provides members a variety of resources and learning opportunities. The latest issue of the online newsletter contains valuable information for members on safety, technology use, informal science organizations, registration information for upcoming events, and many other ideas. [The organization's journal, The Science Educator](#), provides up-to-date peer reviewed articles on the topics that are pertinent for members. NSELA's [Professional Development Institute \(PDI\)](#) and [Summer Leadership Institute \(SLI\)](#) provide networking with other science leaders who have diverse perspectives to share ideas, gather information on best practices, and develop strategies for the improvement of teaching, learning, and leadership for science education.

Professional development sessions and informal networking offer an avenue through which we can reflect on our practices, question and analyze the effectiveness of what we are doing in our roles, and discuss factors to improve our practice. [Join other science educators for NSELA's PDI on Wednesday, March 18, 2009](#). Choose the focus of your professional development from the seven strands provided with the registration information. For an in-depth learning opportunity and informal networking, [register for NSELA's 2009 SLI in Portland, ME](#). I am looking forward to sharing ideas with you.

See you in New Orleans!

Linda Atkinson

NSELA President, 2008-2009

March 19-
March 22,
2009, New
Orleans
[NSTA
Convention](#)

June 28 - July
2, 2009
[NSELA
Summer
Leadership
Institute,
Portland, ME](#)

TECH SUPPORT

RSS

You may have noticed this orange icon on several web sites you visit regularly. Do you know what it means and what it can do for you?



What is RSS?

RSS originated at Netscape in 1999 as a way to gather new and changing content from the Internet. At that time RSS stood for "RDF Site Summary". As developers streamlined and updated the process the next version was named "Rich Site Summary," and the latest version is now named "Really Simple Syndicate". But you can just call it RSS. The orange logo (above) was adopted in 2005 as the official symbol for RSS.

For the common Internet user, RSS is a simple tool for keeping up with the fast changing information on the Internet, particularly now that podcasts, blogs, wikis and social networking web sites allow anyone to post anything anytime. RSS was originally created as a way to keep up with blogs, but now any site can provide an RSS feed. Quite simply, RSS is a way to sanely keep track of all that is going on online that you might be interested in.

How does RSS work?

The people who create a web site will include an RSS page, sometimes called a feed or channel, that contains a summary of the newest information on their web site and metadata such as the author and date published.

These pages can only be read by software called a "RSS reader", "feed reader" or "aggregator" that can show you the feeds from many different web sites all in the same place. RSS readers can be downloaded onto your computer, web-based or even part of your email software.

You can subscribe to a feed simply by clicking on the orange icon on any web site and adding it to the list that your RSS reader compiles for you. The RSS reader then checks all the websites or feeds to which you have subscribed each time you go online and you receive the latest updates either in a web page or in your email.

Some popular feed readers you can download include [Amphetadesk](#) (Windows, Linux, Mac), [FeedReader](#) (Windows), and [NewsGator](#) (Windows - integrates with Outlook). Web based feed readers are also available: . [My Yahoo](#), [Bloglines](#), and [Google Reader](#). You may also already have a feed reader! RSS is integrated into some email programs such as MS Outlook 2007 and Apple's Mail program as well as browsers such as Internet Explorer and Firefox.

Why use RSS?

RSS is a perfect tool for science educators who regularly use the Internet to gather information for lesson plans, the latest science research and anything else you can think

of. RSS readers gather the latest content from the web sites you choose, allowing you to easily stay informed and saving you the time and hassle of visiting each site or joining their email newsletter.

How can I use RSS?

Scientific Research - Many online journals from scholarly research journals provide RSS feeds, often for specific content areas, so that you can stay on top of the latest research in your content area.

Podcasts - You may be using RSS already and not even know it. iTunes and other programs for subscribing to podcasts are simply RSS readers that let you know when new podcasts are available.

Blogs - RSS was initially created to help keep up with blog postings. RSS readers can help you keep up with blogs you read regularly and save you the time of checking to see if there are new postings. If your students blog as part of your course work, RSS can help you keep track of new postings and comments as they are published.

Collaborative Projects - If you use a blog, wiki or a similar web application to collaborate with colleagues or work on projects you can use RSS to be alerted when someone contributes to the discussion or project.

Student Research - Students writing papers or working on research papers can create search feeds, so that each time that topic is mentioned they receive notification in a custom search feed. You can even create feeds for your students from teacher-approved web sites.

Jobs and Grants- Get notified when a position opens up or a grant RFP is posted in an area you are interested in.

Basically, if you find yourself regularly checking the same web sites for whatever reason, an RSS reader can help you cut down on the time you spend looking for information so that you have more time to process and use it.

Get started now by checking out some of these interesting feeds:

[Educational Feeds](#)

[NSTA](#)

[Science/AAAS](#)

[New York Times](#)

[National Oceanic & Atmospheric Administration \(NOAA\)](#)

[Education Podcast Network](#)

[NPR: Science Friday](#)

[Science @ NASA Feature Stories Podcast h](#)

More Resources

[Wikipedia RSS](#)

[What is RSS?](#)

[RSS 2.0 at Harvard Law](#)

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SAFE SCIENCE: BE PROTECTED Sun Safety in Science!

By Dr. Ken Roy

I. Sun Stats and The Science Teacher!

The American Cancer Society statistics indicate that most of the more than 1 million cases of non-melanoma skin cancer diagnosed yearly in the United States are considered “sun-related.” Melanoma, the most serious type of skin cancer, will account for about 60,000 new cases of skin cancer in 2007 and most (about 8,100) of the approximately 11,000 deaths due to skin cancer each year. In addition, more than 1 million Americans will develop nonmelanoma skin cancers this year, and more than 2,800 will die from the disease.

According to a 2006/2007 report by the Australian Institute of Health and Welfare (AIHW) & Australasian Association of Cancer Registries, Australia has the highest rate of skin cancer in the world. Skin cancers account for around 80% of all new cancers diagnosed each year in Australia. Each year Australians are four times more likely to develop a common skin cancer than any other form of cancer. Over 380,000 Australians are treated annually for skin cancer. That equates to over 1,000 people every day. The melanoma incidence rates in Australia and New Zealand are around four times as high as those found in Canada, the United States and the United Kingdom. This is a result of a combination of tropical latitude, fair-skinned population, outdoor lifestyle, and high amount of ambient ultraviolet radiation (UV). In response to this situation, the Australian government has a rigorous offensive against UV exposure, with a focus on school-aged children.

Looking to the future, the U.S. Environmental Protection Agency warns that Americans could suffer 40 million cases of skin cancer and 800,000 cancer deaths in the next 88 years because of depletion of atmospheric ozone.

So what do all of these statistics and concern about skin cancer have to do with the teaching of Science? Here are two ideas to think about:

1. With the resurrection of hands-on science, science teachers and their students seem to be spending more time out in the field. With this comes the increased exposure to UV rays.
2. With the increase in skin cancers forecasted at younger ages, science teachers need to get the word out about sun safety using the “power of the chalk!”

II. A Primer: What Are The Common Types Of Skin Cancer?

The two most common types of skin cancer are basal cell and squamous cell carcinomas. Basal cells are small and round cells found in the base of the outer skin layer. Squamous cells are flat cells forming the surface of the skin. Both of these are highly curable if caught in early stages. Melanoma, the third most common skin cancer is more dangerous. Melanomas are skin cancers formed from the skin cells that make melanin pigment. The exact role played by ultraviolet light in the genesis of melanoma is controversial and subject to debate. Genetic as well as environmental factors (sun exposure) are involved.

Skin cancer can be found early, and both doctors and patients play important roles in finding skin cancer. The following symptoms may indicate skin cancer and should be shared with your doctor:

- any change on the skin, especially in the size or color of a mole or other darkly pigmented growth or spot, or a new growth;
- scaliness, oozing, bleeding, or change in the appearance of a bump or nodule;
- the spread of pigmentation beyond its border such as dark coloring that spreads past the edge of a mole or mark;
- a change in sensation, itchiness, tenderness, or pain;
- persistent non-healing skin lesion

III. What Are The Risk Factors?

The CDC notes certain risk factors more likely to cause skin cancer. They include the following:

- A. Lighter natural skin color.
- B. Family history of skin cancer.
- C. Personal history of skin cancer.
- D. Exposure to the sun through work and play.
- E. A history of sunburns early in life.
- F. Skin that burns, freckles, reddens early or becomes painful in the sun.
- G. Blue or green eyes.
- H. Blond or red hair.
- I. Certain types and a large number of moles.

IV. How To Reduce or Prevent Skin Cancer – Using Safer Behaviors!

The most effective way to reduce or prevent skin cancer is to protect yourself from sun exposure. The CDC recommends five options including:

- A. Seek shade, especially during midday hours (10 a.m. - 4:00 p.m.)
- B. Cover up with clothing to protect skin. There are several companies that offer special sun protective clothing that offers significantly greater protection than “ordinary” clothing.
- C. Use a wide brim hat which will shade the head, ears and neck.
- D. Use sunglasses or shades that wrap around and block 100% of UV-A and UV-B rays.
- E. Apply sunscreen with a sun protective factor (SPF) of 15 or higher with both UVA and UVB protection.

Note that although the CDC recommends an SPF of 15 or higher, most dermatologists today would now recommend SPF 30 or higher.

V. Skin Cancer Prevention Guidelines for Schools!

In the 2002 CDC report titled, “Guidelines for School Programs To Prevent Skin Cancer,” seven broad guidelines were included that school programs can use to reduce the risk for skin cancer among students. This included policy, environmental change, education, families, professional development, health services and evaluation. Each guideline includes suggestions regarding key elements, steps for implementation, and realistic expectations for change. The report states the following:

- **Guideline 1: Policy** - Establish policies that reduce exposure to UV radiation.
- **Guideline 2: Environmental change** - Provide and maintain physical and social environments that support sun safety and that are consistent with the development of other healthful habits.
- **Guideline 3: Education** - Provide health education to teach students the knowledge, attitudes, and behavioral skills they need to prevent skin cancer. The education should be age-appropriate and linked to opportunities for practicing sun-safety behaviors.
- **Guideline 4: Family Involvement** - Involve family members in skin cancer prevention efforts.
- **Guideline 5: Professional development** - Include skin cancer prevention knowledge and skills in preservice and inservice education for school administrators, teachers, physical education teachers and coaches, school nurses, and others who work with students.
- **Guideline 6: Health services** - Complement and support skin cancer prevention education and sun-safety environments and policies with school health services.
- **Guideline 7: Evaluation**- Periodically evaluate whether schools are implementing the guidelines on policies, environmental change, education, families, professional development, and health services.

V. Science Teachers – An Important Role!

The trend for skin cancer is showing increases worldwide. Schools and especially science teachers need to play a major role in helping to protect students from unnecessary exposure to sunlight and UV radiation. Science teachers can be effective in this area relative to curriculum development, professional development, policies and environmental changes. Their expertise and influence with students make them a critical catalyst in providing essential skin protection safety and modeling appropriate sun exposure behaviors. A majority of skin cancer can be prevented. Help make the difference in your students’ future quality of health and life

RESOURCES:

American Cancer Society – <http://www.cancer.org>

American Academy of Dermatology – <http://www.aad.org>

Australian Institute of Health and Welfare - <http://www.aihw.gov.au/>

Centers For Disease Control and Prevention- <http://www.cdc.gov/MMWR/preview/mmwrhtml/rr5104a1.htm>

EDITOR'S NOTE: Special thanks to dermatologist Andrew V. Atton, M.D., Glastonbury (CT) for his professional review and contributions to this article.

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Regional News

[News from Region A](#)

Greetings, NSELA Region A members!

As the snow falls in New England, many of us start to think about our summer plans. How about including a trip to the Maine coast? NSELA's Summer Leadership Institute, Science Curriculum Topic Study: A Standards and Research-Based Approach to Leading Professional Learning, will be held June 28 – July 2, 2009 in Portland. Curriculum Topic Study (CTS) is an NSF-funded project that has developed a set of tools and a professional development study process to help science educators deeply examine common curricular topics. Participants will become familiar with the CTS tools, processes, and professional development designs, learn facilitation skills and techniques for leading CTS, and apply CTS to their own work using a CTS Authentic Task Protocol. [Learn more and register online.](#) Why not invite a colleague and carpool to Portland? It's only a short trip away!

A sincere thank you to Beth Snoke Harris, our NSELA Web Master, for creating a resource, event, and web site sharing link for our Region A members. If you have an event or resource of interest to science education leaders in our region, please [submit the information online.](#)

[Joyce Tugel, Region A Director](#)

[News from Region B](#)

Science education was alive and well at the Thirty-Second Annual New Jersey Science Convention, held in October in Somerset, New Jersey. Clearly, science educators are doing great things in their classrooms!

The convention offered a wide range of workshops for science educators of all levels. Teachers could learn about creative assessment in the chemistry class, hands-on integrated science activities for middle school, or inquiry-based science for the elementary school classroom. Several presentations were conducted by educators with an NSELA connection, including NSELA President Dr. Linda Atkinson, who spoke on integrating authentic research experiences into classroom practices, and NJSELA President John Chapman, who conducted an open forum for science leaders and supervisors. Please [visit the New Jersey Science Convention website](#) for information on presenting a program.

The keynote speaker at the Annual Banquet was Dr. Jeff Goldstein, the Director for

the National Center for Earth and Space Science Education. Using an interactive approach in his talk “Celebrating the Past, Embracing the Present and Inspiring the Future: Human Exploration – the Journey Continues,” Dr. Goldstein challenged the conference attendees to emphasize both what is known about the universe and how it has come to be known. Dr. Goldstein recreated the replica of the Voyage Scale Model Solar System located on the National Mall in Washington – in the banquet room! The Model provides “visitors with a powerful understanding of what we know about Earth’s place in space and celebrates our ability to know it.” Several similar installations are being developed around the country.

In other professional development news, the Channel 13 Celebration of Teaching and Learning returns to the New York Hilton on March 6 and 7. This year, the conference strands include science, global education and instructional technology. Keynote speakers include Alan Alda, who will speak on “The Human Spark” and actress Danica McKellar (Winnie on The Wonder Years) who will discuss empowering middle-school girls with math “know-how.” [More information on the conference may be found online.](#)

Moreover, there are some new changes to the NSELA [Region B Website](#). You may share resources, events and web sites with other members of region B in the on-going forum. Plus, you will be able to discuss science education and science education leadership issues on the new [NSELA Region B Science Education Leadership Blog!](#)

[Eric Walters, Region B Director](#)

[News from Region E](#)

Learning About Science Teaching

The Surveys of Enacted Curriculum (SEC) was developed by the Wisconsin Center for Education Research, University of Wisconsin, Madison and the Council of Chief State School Officers to measure the enacted curriculum - what teachers say is happening in their classrooms in subject areas such as science. SEC provides opportunities for Wisconsin science teachers to reflect on their own instructional practices, teaching strategies, and classroom cognition activities - their enacted teaching. After completing an electronic survey, individual feedback is immediate for the teacher through visual data displays (www.seconline.org). Wisconsin has been actively participating in SEC for the past five years.

During the survey process science teachers are asked a series of questions about their craft. As an example, the survey asks teachers about time they spend on various instructional tasks and about the content covered while completing the instructional tasks. The very nature of the questions asks each teacher to think about their teaching, and answer each after a brief reflection on the question itself.

Once the surveys are completed, the teacher’s visual data is available. Each will be able to see their enacted teaching. See Figure 1. This visual (plus others) will allow them to uniquely reflect on their practice, see how they are engaging their students in cognitive activities, and compare this to other nonspecific aggregated survey visuals. Once each has reflected on their personal visual teaching data, they can discuss the

data with colleagues in their building at their grade level or with colleagues teaching the same subject in their building or district.

SEC has become a powerful tool for Wisconsin science teachers and their districts. Aggregating the SEC teaching data allows a district to determine gaps and redundancies in the enacted curriculum. From this information a district is able to make changes to the district science program in terms of what to teach and what resources will support those changes. Individual teachers can retake the survey and determine what changes they have made in their teaching by comparing this to previous survey information.

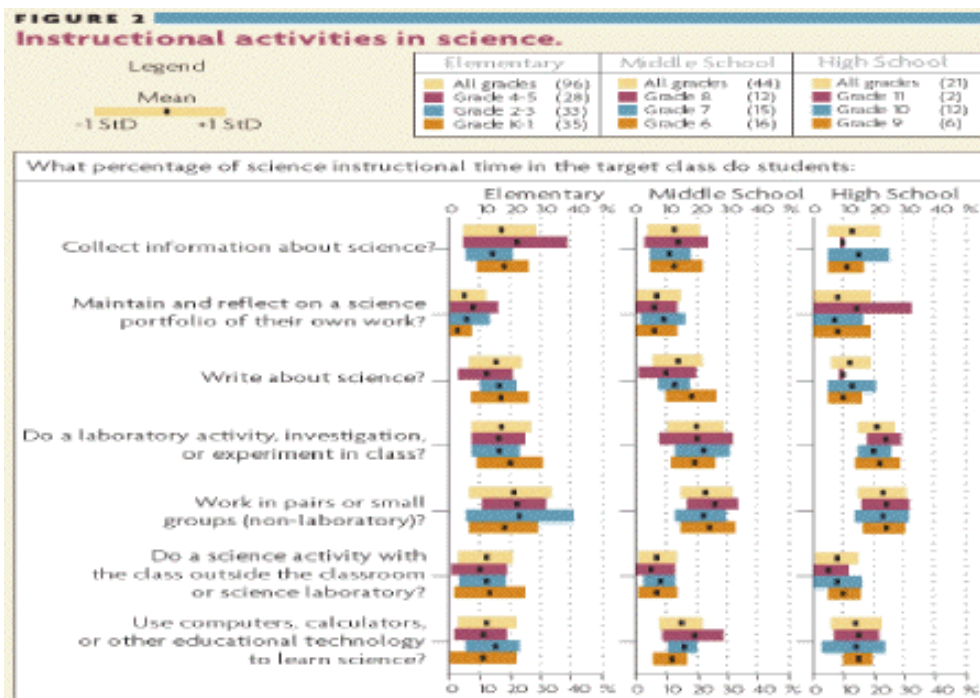


Figure 1: Visual data example of the SEC data and from *The Science Teacher*, 2004 (Blank & Hill, 2004).

Submitted by Shelley Lee, Science Consultant for the Wisconsin Department of Public Instruction.

[News from Region F](#)

Phoenix Area Science Teachers Benefit From Successful Collaborative Effort!

With over 60 different school districts in the Phoenix Arizona area, each with its own curriculum adoption cycle varying from year to year, it's hard to collaborate when it comes to resources and professional development. Science curriculum materials are being adopted each and every year since there is no common cycle. Add to that the fact that many districts are very small, there isn't much bang for the buck, so to speak, when it comes to services from vendors.

Fortunately for us, our local representatives from Delta Education and Lab-Aids have supported an initiative that makes it possible for many of our districts to have high quality professional development, while at the same time, providing opportunities to

build a cadre of teacher leaders valley wide.

Beginning with the summer of 2006, Richard Pacheco of Delta Education organized a team of science coordinators, along with consultants Brownie Lindner and Becky Bogert, to plan a summer institute for those AZ districts who had adopted FOSS. It was so successful that a second institute separating K-5 and 6-8 was held in July of 2007. This past summer, 2008, the event evolved into an institute that met all levels of need and spanned from June to August! Joined by Lab-Aids (SEPUP) for the middle school portion, three main sessions were offered and well attended: leadership, advanced use, and first time use. A team of outstanding teacher leaders, supported by Richard, met throughout the year to plan the summer. Participants' comments were overwhelmingly positive!

From a 4th grade teacher:

I felt that this training was one of the best I have ever attended. It was wonderful to have the opportunity to interact with teachers from other districts. The discussions were invigorating! The presenters were responsive to our interests and let us direct our own learning. You should have seen the excitement when we got the telegraph to work for the first time. I have taught the Magnetism and Electricity unit four times and now, at last, feel that I'm competent to teach the unit. I have to confess that I never got the big idea of the unit, the connection between magnetism and electricity, until I attended the training in June. Through the academy, I realized that I was guilty of teaching the FOSS investigations as a series of activities and not giving students the opportunity to make sense out of the investigations through writing. I know I will do a better job teaching the units this year. One part of the academy that was so much fun was when we were doing the snail pull on the last day. There were two male teachers from another district at our table who will be teaching this unit for the first time. Well, they were totally blown away by the number of washers the snail could pull. One of the men got so excited that if he had been a fourth grader, I bet he would have wet his pants. Their excitement was contagious; they both said that they could hardly wait to teach this unit to their kids. Now that's the mark of successful teacher training."

Thanks to Delta Education, Lab-Aids, and to Richard Pacheco and his team who had a vision that moved beyond the "X number of days for professional development, based on how much money the district spends". We are looking forward to 2009!!

[Janey Kauffmann, Region F Director](#)

Informal Science Education:

Getting More Science Into Out of School Time (OST)

By Cheryl Lani Juarez

In 2004, the Miami Science Museum was awarded

funding from the National Science Foundation to develop a professional development model and hands-on science curriculum for children in elementary afterschool programs operated by community-based organizations as well as those operated by schools. After-school Program Exploring Science, or APEX (www.miamisci.org/apex) was a collaboration between the Museum, the YMCA, YWCA, FCAA and the Miami Dade County Public Schools. I served as the project director, and as the project progressed, I learned more and more about the growing national community of formal and informal educators partnering to provide high quality curriculum, materials and training for the millions of children who leave their classrooms and spend hours in after-school programs every day of the school year.



Billions of federal and private dollars have been allocated to providing these children, often from the poorest communities, with after-school programs over the past few years. Note that the 2009 education budget for elementary and secondary education proposed in February 2008 included \$800 million for a reauthorized 21st Century Community Learning Centers program, renamed 21st Century Learning Opportunities, that would “radically reform the current program into a scholarship fund enabling poor students in low-performing schools to enroll in high-quality after-school and summer school programs aimed at increasing student achievement.”

This article introduces you to two excellent resources aimed at advancing the field of after-school STEM and helps you identify high quality afterschool science curriculum and programs, so please read on!

The Coalition for Science After School

www.ScienceAfterSchool.org

“After-school programs are a perfect place to let young people explore science and technology. There is often more flexible time and opportunity to work in groups. Adults in charge can let kids ‘play’ with science in the same way they play sports or explore the arts. High-quality after-school experiences are fun and engaging, and they spark an interest that translates into classroom success and career options,” said Jason Freeman, Executive Director of the Coalition for Science After School.



The following is an excerpt from the Blueprint for Action developed by the Coalition for Science After School. You can download the document from the Coalition’s web site. The Coalition is dedicated to coordinating efforts to advance the field of after-school STEM. The Blueprint for Action that follows lays out the priorities identified by the Coalition as necessary to this effort.

The Vision: Young people from all backgrounds have access to high quality STEM learning experiences during out of school hours.

The Means: Purposeful, coordinated, strategic efforts that make full use of available

knowledge, research, resources, and materials.

Realizing this vision requires the integration of the expertise and experience of multiple fields—after-school learning, youth development, and informal science education, as well as the disciplines of science, technology, engineering, and mathematics.

The Blueprint calls for action in three areas with a charge to:

- Provide engaging and intellectually challenging programs, curricula, and activities
- Build staff capacity
- Develop appropriate assessment and evaluation measures

Six drivers undergird action in all three areas:

1. After-school STEM incorporates up-to-date science content, scientific processes, and tools; and emphasizes the centrality of STEM learning to the acquisition of essential 21st century skills.
2. Equity is a driving force, and representation by all groups is a priority for all projects. As much as possible, materials and programs are multilingual, culturally sensitive, and accessible to persons with disabilities.
3. New efforts build on existing materials, models, and research in science education, learning and cognition, and youth development. Individual efforts contribute to a growing literature base to promote sharing and understanding of promising practices.
4. Community involvement and roles for parents and families are included from the outset of projects and initiatives.
5. Professional development honors the knowledge and commitment of the after-school workforce, and creates paths for advancement of individuals as it raises the quality of the field.
6. Project evaluations draw from a framework with an accepted, common set of outcomes. These outcomes reflect the broad goals of the fields as well as research on optimal roles for after-school STEM.

NSELA members should note that the Coalition’s blueprint is also intentional about recognizing the need for a close relationship with formal education. The blueprint states “Coordination and alignment with the formal education system must be done deliberately at all levels, including national and local projects as well as cutting across projects and sharing between experts in after-school STEM and formal education.

In September 2008, the Coalition convened the first National Conference on Science and Technology in Out-of-School Time. With nearly 300 energized and focused participants and dozens of expert presenters, this proved to be a grand forum for discussion, sharing, networking, and planning for the future. A wikispace was created to share resources; you can browse at <http://scienceafterschool.wikispaces.com/>

For more information, contact Jason Freeman, Executive Director, Coalition for Science After School, University of California, Lawrence Hall of Science #5200, Berkeley, CA, 94720, (510) 642-8106, (617) 270-8729, ScienceAfterSchool@gmail.com



The second resource you may want to get to know and use is **The Consumers Guide to After-school Science Resources**.

<http://www.sedl.org/afterschool/guide/science/>

The Guide was created through a partnership between Lawrence Hall of Science at the University of California, Berkeley and SEDL (formerly the Southwest Educational Development Laboratory), with funding from the USDE. It aims to share

information about sources of high-quality, hands-on science content for after-school programs. Inspired by the popular Zagat Survey restaurant reviews, developers at Lawrence Hall of Science began in July 2005 with an open nomination process, asking after-school practitioners to recommend programs and/or materials that they themselves had used or seen in action and found to be of high quality.

Next, Coalition for Science After School members reviewed all nominations and selected those that seemed most promising. Each of these selected resources then received a written commentary from one after-school and one science content expert (including high school science teachers) to serve as reviewers. They were asked to examine the quality and accuracy of the material, its social and entertainment value, its appropriateness for the after-school environment, and its durability and cost.

Reviewed materials include semester and year-long curricula, activity kits, instructor guides consisting of many related activities, and Web sites that offer content appropriate for afterschool programs. Users of this guide are able to search and sort entries by title, subject, grade level, audience, and cost. A brief description of each resource is accompanied by two expert reviewers' detailed commentary.

Cheryl Lani Juarez is the Director of Professional Development for the Center for Interactive Learning in the Miami Science Museum. She can be reached at 305-284-2757 or by email at Cheryl@miamisci.org.

Celebrating the Year of Science: Laissez les bons temps rouler! **2009 New Orleans NSTA Conference on Science Education Update**

The Conference Planning Committee has put together a fabulous line-up of Featured Presentations and Shell Science Seminars for the 2009 NSTA New Orleans Conference on Science Education.

Ethnobotanist **Mark Plotkin** will be the **General Speaker** to open the 2009 NSTA Conference on Science Education in New Orleans as he return to the states from his work in the rainforests of Central and South America. A New Orleans native, Plotkin has been identified as a "Hero of the Planet" by Time magazine and by Smithsonian magazine as one of "35 Who Made a Difference."

For 20 years, Dr. Plotkin has been working and studying with the native shamans in the rainforests of the southern hemisphere. He is the President of the Amazon Conservation Team which is dedicated to preserving and protecting tropical rain

forests. His life's effort to learn about the rich and diverse plant life of the rain forest highlights our 2009 conference strand "Science and the Human Spirit."

Dr. Plotkin's is well known for his work on the IMAX film Amazon, which was nominated for an Academy Award as Best Documentary and as the author of *Tales of a Shaman's Apprentice*. There is also a children's version of the book, entitled *The Shaman's Apprentice - A Tale of the Amazon Rain Forest*. Lynn Cherry was the co-writer and illustrator for the youth publication. Dr. Plotkin's newest publication is *Medicine Quest: In Search of Nature's Healing Secrets*.

The **Featured Presentations** include a panel discussion on the **20th Anniversary of Science for All Americans**. The panel will be moderated by Page Keeley and include George "Pinky" Nelson and Jo Ellen Roseman (AAAS 2061)

Shell Science Seminar presenters include:

Michael Weiss, the deputy project manager of the [Hubble Space](#) Telescope, will bring some focus on the discoveries of the 18 years of exploration including the recent images of a planet orbiting another star - a great tribute to the Year of Astronomy.

Nancy Rabalais, from the Louisiana Universities Marine Consortium (LUMCON), is internationally known for her work on hypoxia especially the annual fluctuations of the Dead Zone in the Gulf of Mexico.

Francis Halzen, from the University Wisconsin-Madison, is working on the AMANDA experiment with the first-generation neutrino telescope at the South Pole.

R. King Milling is the Chair of the [America's Wetland Foundation](#) and the Campaign to Save Coastal Louisiana. The AW program includes the efforts of America's Energy Coast and the Conservation Corps.

Appearing as a Featured Presentation

Bill Deese and Cathi Cox have the [Dead Chemists' Society Road Show](#) which has been enjoyed by hundreds of teachers and students across the south.

The Planning Committee and members of the Louisiana Science Teachers Association look forward to welcoming our NSELA colleagues in science education to New Orleans for the 2009 NSTA Conference. Plan now to join us and science educators from around the world.



New Orleans, Louisiana
March 19-22, 2009

Who Should Attend?
Science Teachers, Principals, Administrators, Curriculum Specialists, Science Coordinators, College Methods Professors

And Why?

- For personal and professional growth
- To gain new teaching skills and strategies
- To learn from experts and become inspired
- To attend presentations, workshops, and seminars in your discipline and grade band
- For information on relevant issues—literacy, assessment, inquiry—and more
- For networking with peers and professionals who nurture your passion for science

Field Trips

- Cajun/Creole demonstration cooking class and lunch
- Twilight Canoe Trip—Cane Bayou and Lake Pontchartrain

The Ultimate Science Classroom Giveaway
Win one of four fully equipped science classrooms for your school (elementary, middle, high school, college).

Questions? Call 1-800-722-6782.
Visit www.nsta.org for more information, or to register.

Source Code: NDCNPR



Professional Development Strands

- Science and the Human Spirit
- Research to Practice: The Science Teacher Professional Continuum
- Energy and the Environment: The Natural and Human-designed World
- ISTE: Meeting the Needs of the Digital Student

NSTA National Science Teachers Association

Update on NSELA's Safety Position Papers

Dr. Ken Roy has updated original versions of the following position papers.

- a. Experiments with Human Blood
- b. The Role of the Science Education Leaders in the Implementation of the Right to Know Act of their State
- c. Class size in Science Laboratory Rooms
- d. Code of Practice on the Use of Animals in Science Education
- e. Science Teaching Conditions

Currently, the revised position papers are to be presented to NSELA's board.

Summary of Fall 2008 NSELA Board Meetings

Submitted by Trisha Herminghaus, NSELA Secretary

The Annual Fall Meeting of the National Science Education Leadership Association (NSELA) Board of Directors was held in Charlotte, North Carolina on October 31 and November 1, 2008 as part of the NSTA Regional Conference on Science Education. Present were Diane Affleck, Beth Allan, Linda Atkinson, Judy Hamilton, Trisha Herminghaus, Janey Kaufmann, Eric Waters, Pat Shane, Susan Sprague, Karen Charles, Jerry Valadez, Susan Koba, Joyce Tugel and Brenda Wojnowski.

The board spent Friday, October 31st in work sessions to examine the Operations Manual, the By-Laws, and the NSELA committees, for optimum efficiency and to bring the reality of practice in line with the organization's governing documents.

On November 1, the NSELA Board of Directors met for its annual Fall Meeting. A

focus for the NSELA Board of Directors this year is the upcoming 50th birthday for NSELA. This exciting year of activity will be kicked off in New Orleans at our March 18th Professional Development Institute (PDI) during NSTA's National Conference on Science Education. The 50th Anniversary Year will culminate in a celebration at the NSTA National Conference in 2010 in Philadelphia.

Professional Development remains a focus for NSELA, so plans for the upcoming Professional Development Institute (PDI) and the Summer Leadership Institute (SLI) were discussed in regards to philosophy, logistics and finances. A decision was made by the board to look into planning and advertising our Summer Leadership Institutes two to three years in advance to allow members time to plan ahead. Stay tuned for the list of upcoming sites for the NSELA Summer Leadership Institutes!

NSELA is pleased that Past NSELA President Pat Shane has been selected as President-Elect 2008 – 2009 of the National Science Teachers Association. Congratulations Pat!

NSELA members, keep in touch with your regional director to help maintain a network of science educators in your area. As leaders in science education we owe it to ourselves to take advantage of the resources to work as effectively as we can. [See what is happening in your region!](#)

Please consider joining us in New Orleans for the NSTA National Conference on Science Education. The March 18th Professional Development Institute (PDI) that precedes the NSTA conference is a fabulous opportunity to join your science education colleagues in dialogue about your work.

The Summer Leadership Institute (SLI) will be held in Portland, Maine from June 28 – July 2, 2009. The conference topic is Curriculum Topic Study and will be presented by Page Keeley and Joyce Tugel. Join us in New Orleans or Portland, Maine. We look forward to seeing you there!

Share the articles you find in the Science Educator with a friend!

ICASE News

[The International Council of Associations for Science Education \(ICASE\)](#) is the Non-Governmental Organisation, set up by its members [National STAs, Science societies, Science centres, etc] forming an international communication network. The ICASE role is to:

1. extend and enhance the quality of formal and non-formal science and technology education for all, with particular reference to the children and youth of the world.
2. provide and support activities and opportunities that will enhance formal and non-- formal science and technology education throughout the world.
3. assist and support all members and other organisations throughout the world which are involved in formal and non-formal science and technology education.
4. establish and maintain an international communication network for member organisations and their members involved in formal and non-formal science and

- technology education.
5. encourage and support the establishment and development of professional science and technology organisations, especially teacher organisations in all countries.

Check out these excerpts (in pdf format) from the latest issue of the ICASE Newsletter

- [ICASE Activities - a STEP activity for young children plus an activity for lower secondary level](#)
 - [ICASE Calendar of Events](#)
 - [Teaching Goals from US National Science Education Standards](#)
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