Community Resources for Science

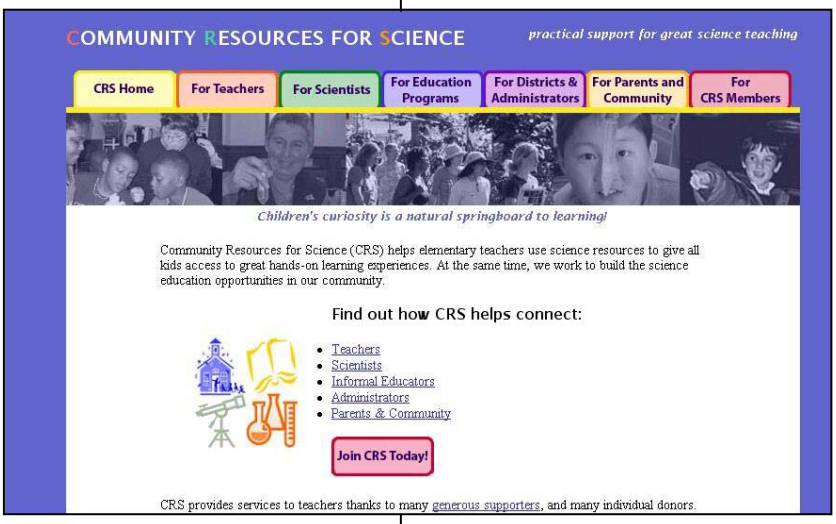
practical support for great science teaching

Volume 4, Issue 1 Newsletter, Spring 2006

This Issue: CRS Offers New Tools and Resources!

CRS Website Has New Look—and New Features!

We have a new website!. If you haven't checked it out lately, it's worth taking a look at www.CRScience.org. The website is organized to address the needs and interests of different people in our community of educators: teachers, scientists, informal educators, administrators, parents, and community—as well as our members!



Teachers – press the orange teacher tab at the top of the page and you will find resources for bringing science to your classroom. On the "planning tools" page you will have access to templates and worksheets we use in our professional development workshops. You will also find pages designed with selected web links for Life Science and Physical Science websites all organized by grade level to reflect the California State Science Standards. Sign up for membership online. Check out the resource calendar for information on professional development workshops, grant deadlines and new science exhibits coming to local museums.

Scientists – the green tab at the top is your entry to information about our popular Community in the Classroom scientist volunteer program. Refer your friends to this section for general information on how to become a scientist role model in Alameda County Elementary Schools. Find out the dates of upcoming volunteer orientations. With your help we are hoping to add new features in the coming months like complete lesson plans, your tips for successful classroom visits, and more.

Education Programs – The blue tab links to pages designed for our friends in informal science education. We have done a number of research and evaluation projects for museums and other science resource agencies in the Bay Area. Take a look to get ideas about how CRS research can help you.

Districts and Administrators – Use the purple tab to find out about our series of professional development workshops for your school. We will work with you to find a workshop focus that will help your faculty develop their science planning skills. Do you want your staff working together on a particular strand of the science standards? Do they want assistance integrating science into their daily lesson plans? Maybe your staff is ready to take a close look at science assessment in the classroom to better understand what students are learning. Check out the website or contact CRS for details.

Parents and Community – We want to help link teachers with the science resources in our community—including parents! On these pages accessed by the yellow tab, you can learn about supporting science education in your local elementary school and donate to CRS in order to help us bring our services for teachers.

Please give us your ideas for improving our website by emailing teach@crscience.org

CHECK IT OUT!

Sign up for or renew your membership—or make a contribution to CRS—on our website using PayPal!

Inside

New Volunteer Project! Scientist Teacher Partnerships

"*I think I want to be like you guys maybe when I grow up. Thank you very much!*" (3rd grader)

"*I have a rewarding sense of accomplishment after observing the students learn over an extended period of time..*" (volunteer)

"*Physical science came alive with real-life scientists and hands-on centers. I'm definitely a better teacher as a result of this project.*" (classroom teacher)

These are just a few of the responses to the Scientist Teacher Partnership project piloted at Cragmont Elementary School in Berkeley this school year. This new variation on our popular Community in the Classroom scientist volunteer program creates teams of scientists and teachers to develop and co-teach a unit. With funding from the Camille and Henry Dreyfus Foundation, our pilot paired graduate students from the UC-Berkeley Chemistry Department with the teaching teams at first, third, and fifth grades at Cragmont. Each grade level group worked together to choose a content focus within the physical science strand of the CA Standards, and then landed on their own format and schedule for working together.

The first grade team led activities with solids, liquids, and gases. The third grade team designed experiential stations for a range of activities exploring changes of state. The fifth grade team created hands-on lessons exploring the complexities of the Periodic Table of Elements. The volunteer teams visited each class at their grade level two or three times, and the teachers structured the volunteer visits within a larger landscape of activities, reading, writing, and projects.

The process was rewarding for everyone. Although it involved a significant investment of planning time, teachers and volunteers enjoyed vibrant exchanges around content and teaching techniques, and many of the activities can be replicated by the teachers next year.

We're looking forward to refining this project with more volunteers and teachers in school year 2006-07!

Interested in volunteering with CIC or the Scientist Teacher Partnership project? Contact CRS for more information or to find out how to apply.

Be CuRiouS: Finding Science Activities on the Web

Why not go on a surfing vacation this summer—using the Internet!

Your first stop might be CRS's Teacher Planning Tools page at http://www.crscience.org/teacher/tools.html. We've done research to select websites that support grade level science standards by strand. These selections can give you a great starting place for finding websites with teacher background, printable classroom activities, and places kids can do research or activities on-line on their own.

But don't stop there! Doing your own searches can be really exciting, and there are terrific "meta-sites" that can get you headed in the right direction.

Looking for a huge catalog of science resources? The National Science Digital Library, http://nsdl.org, is a huge, free, online library for education and research in science, technology, engineering, and mathematics.

More focused on teachers, Marco Polo, http://www.marcopolo-education.org/index.aspx, is a searchable index of standards-based Internet content and professional development for K-12 teachers and students.

The Internet4Classrooms website, http://www.internet4classrooms.com, is dedicated to helping teachers use the Internet and, in addition to lesson plan lists and links, it has free, self-paced tutorials on how to use common software, search engines, and more.

FirstGov for Kids provides lots of links to government sites with interesting kids' science content: http://www.kids.gov/k_science.htm
Also check out FirstGov en Español: http://firstgov.gov/Espanol/Topics/Ninos.shtml

Want to find just plain cool science stuff? No better place that the Exploratorium's "Ten Cool Sites" http://www.exploratorium.edu/learning_studio/sciencesites.html with lots more than 10 links to fascinating and unusual websites, sorted into many science categories.

If you're interested in on-line professional development, the Annenberg/CPB Teachers' Lab at http://www.learner.org offers "A place for teachers to explore new ideas in learning." This huge resource includes video workshops on science content and pedagogy, including free, downloadable video on demand.

Members—don't forget you can call CRS any time to request a website report that supports your classroom teaching plans!

New Workshop! Teaching Science with Inquiry

Teachers investigate the properties of spinning tops at a pilot Inquiry Workshop.

CRS has developed a new workshop series that will be offered to interested schools in 2006-07 on how to use inquiry to teach science. The Inquiry Workshops were developed with the assistance of Susan Bellone and Sherry Johnson, teacher leaders for science professional development in Castro Valley Unified School District and piloted at Berkwood Hedge School in Berkeley. We're thrilled that these two wonderful teachers will be helping us deliver this new workshop next year.

The goal of Teaching Science with Inquiry is to provide easily accessible, practical assistance in how to blend inquiry into science lessons to stimulate active learning. Teachers do their own inquiry activities and learn classroom strategies and approaches to guiding students to develop and test questions that fit grade-level teaching goals and standards.

Many of the experiences and materials used in the workshop were drawn from the week-long Institute for Inquiry offered by the Exploratorium, and combined with CRS teaching tools and resources.

The series is offered as three, 2-hour workshops on school sites for whole faculty groups or as a full-day workshop.

The workshop gives teachers an overview of different methods for teaching science, hands-on experience with an inquiry investigation, and pulls out the specific techniques that teachers use to stimulate scientific exploration. The workshop also helps teachers understand how to use inquiry investigations to meet the different grade-level requirements of the Investigation and Experimentation Strand of the California State Science Standards.

A participating teacher commented:

"*The workshops were a time to reflect on my teaching practice with colleagues and plan lessons/units applying the standards with inquiry-based lessons/goals.*"

Contact CRS if you're interested in more information about any of our workshops and we'll send you our new brochure!

Thanks to our Donors — *School Year (September—June) 2005-06*

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Your Contributions Say Thanks to Teachers

Making a contribution to CRS is a way of providing direct support to teachers for science professional development. You can use our pledge form to acknowledge a special teacher, or inquire with CRS about how to give a gift membership to your favorite teacher!

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Check us out online:
www.crscience.org

CRS Staff Update

We are delighted to welcome Cecille Harris to the CRS staff as our new Program Coordinator. Cecille comes to us with a wealth of experience in elementary schools and teacher professional development programs across the country. She's looking forward to getting to know all our members and volunteers as she helps with workshops, trainings, and requests.

We're also happy to report that we're not losing Corinn completely—she will stay connected through our new "virtual" office to help make sure the resource database stays up to date in order to fulfill your requests for program and materials information.

This school year we've benefited enormously from two magnificent volunteers: Katherine Langer worked with Corinn on doing photo documentation of the Community in the Classroom project, and along the way helped enormously with organizing the project's communications and record-keeping systems. CompuMentor volunteer Ann Knepper provided a huge service in some much-needed redesign work on the Resource Database.

Finally, we've been so pleased to work more closely with master teachers Sherry Johnson and Susie Bellone, who have offered their expertise in workshop design and helped us refine our work this year.

The mission of CRS **is to build a community of educators dedicated to getting kids excited about learning through science. This community includes YOU! Whether you're a teacher, a scientist, a parent, or an informal educator, let us help you connect with elementary students, schools, or science programs to support great science teaching.**

CRS Staff and Board

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Corinn Brown, *Database Content Manager*
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