



The CRCST Quarterly

Volume LXVIII No. 1

68 Years

Spring 2012

What's new in CRCST?

Renata Brown,
CRCST President

Our Spring Symposium, Thursday, April 26th at Cleveland Metroparks Zoo, will focus on Student-Centered Learning. See the registration form later in this issue and I hope to see you there.

We are always looking to get more people interested in serving on our Board. Serving is a great way to help Cleveland area teachers learn more about science opportunities and inspire students. Elections are held at our Fall Conference... why don't you think about it?

Speaking of our Fall Conference, save the date and get ready for the location: Saturday, October 27th at the Greater Cleveland Aquarium! Ray Patacca, formerly with Lake Farmpark, is the Education Manager there and sits on our Board. Special thanks to him for helping make this happen and I personally CANNOT WAIT to have our event there. Who else remembers field trips to the old Cleveland Aquarium? The place will forever be ingrained in my brain and I can't believe the new one actually opened. Yay fish!

Best of luck as you wrap up this school year. Keep CRCST in mind as a resource for you and your students!

Two CMSD Schools Nationally Recognized for Achievement

In a time of tough decisions and budget crunches for the Cleveland Metropolitan School District, it is always nice to hear news that highlights the hard work and dedication of the students and faculty in our city.

Each year, The National Center for Urban School Transformation (NCUST) identifies the nation's best urban schools and their accomplishments and an Education Award formally recognized these efforts. This year's awardees include two Cleveland Metropolitan schools – William Bryant Elementary School, and MC²STEM High School! This is great news for our city, and is worth mentioning that only 14 schools were bestowed this honor in 2012, and the two Cleveland schools were the only winners from Ohio.

The NCUST, which is housed at San Diego State University in California, identifies, celebrates, and promotes the best practices of our nation's highest performing urban schools. Their Mission: *To help urban school districts and their partners transform urban schools into places where all students achieve academic proficiency, evidence a love of learning, and graduate well prepared to succeed in post-secondary education, the workplace, and their communities.*

NCUST provides programs, tools, and research to urban districts to help them create better curricula and emphasize continued improvement.

To be considered for a NCUST Education Award, schools must submit an application, and are evaluated against criteria including academic proficiency and achievement, attendance, and excellence in science, technology, engineering, and mathematics (STEM). This year, there were 27 finalists from all over the U.S., including three from Cleveland. William Bryant Elementary School was a standout in the K-8 category for student proficiency in reading and mathematics, and their collaborative teaching staff. MC²STEM High School was recognized for their focus on project-based learning, focus on STEM, integration of content mastery into each subject area, and student proficiency in mathematics, science, reading, and writing.

The award winners receive \$3500 for textbooks and materials, and each principal will present an interactive breakout session at the NCUST Excellence in Urban Education National Symposium in San Diego, May 23-25. Here they will model best practices in teaching for other educators, and share resources with other winners and participants.

Other area schools were recognized as part of NCUST's 2012 Education Award process: Tremont Montessori was a finalist for the 2012 awards. **Douglas MacArthur Girls Leadership Academy, Louisa May Alcott Elementary** (also a 2008 NCUST winner), **Orchard STEM School**, and **Riverside School** were recognized on NCUST's 2012 Honor Roll.

Local Science Happenings

Cleveland Botanical Garden:

Hershey Children's Garden opens April 1
 Spring bulb display April-May
 African violet and gesneriad show April 14-15
 Interior Design Showcase April 14-May 13
 Invitational Floral Design Show April 20-22
 Daffodil show April 28-29
 Mother's Day Brunch May 13
 BotaniCool Kids Camp June 18-22 and June 25-29
 For more information visit www.cb garden.org

Cleveland Lakefront Nature Preserve (formerly Dike 14) is now open to the public! The 88-acre man-made peninsula is on the Lake Erie shoreline in the heart of Cleveland. It is adjacent to Cleveland Lakefront State Park and located at the northern end of Martin Luther King Jr. Boulevard. The Preserve is a haven for a variety of migratory birds, butterflies and animals. Visit <http://www.dike14.org/home.htm> for more information.

Cleveland Lakefront State Park:

Exploration Station Nature Center, Select Saturdays 1-4 pm.
 Shipwreck Speaker Series for Adults (Part II), April 11, 7:30 pm.
 Friday Family Fun Night: Shipwreck Science, Friday, April 20, 7-9 pm.
 Earth Appreciation Day, Saturday, April 21 @ 1-4 pm.
 The Great Euclid Creek Invasive Plant Pull, Saturday, May 12, 10 am-noon.
 CLNP Spring Open House Event, Saturday, May 19, 7:30 am-2 pm.
 Fishing Fun – Saturday, May 26, 10 am-noon.
 Recycling Stop by, Saturday, May 26, 1-4 pm.
 Trash & Pancakes, Saturday, June 2, 9 am-noon.
 Transit of Venus, Tuesday, June 5, 6-10 pm.
 Summer Nature Programming begins June 14
 Summer Kick-off Beach Party, Saturday, June 16, 1-4
 Sandcastle Demo & Contest, Sunday, June 24, 1-3 pm.
 For more info: www.clevelandlakefront.org and click on 'Naturalist Programs'

Cleveland Museum of Natural History:

Project WET Educator Workshop April 14
 Mythic Creatures Teacher Workshop April 21
 Project WILD/Aquatic WILD Workshop June 30
 Local Flora Field Course July 23-26
 For more information visit www.cmnh.org/site/SRC.aspx

Conservancy for Cuyahoga Valley National Park Environmental Education Center:

Girl Scout Weekends April 13-15 and May 18-20
 Ohio Certified Volunteer Naturalist State Conference April 27-28
 Summer Camp Open House May 6
 Pancake Breakfast at Stanford House May 13
 Seeds of Learning Farming and Food Program: This Little Farmer Goes to Market June 16
 2012 Leopold Education Project National Conference June 21-24
 Summer camps start June 10!
 For more information, visit www.conservancyforcvnp.org

Cuyahoga County Solid Waste District

For more information: www.cuyahogasd.w.org
 Shred Day April 14, 9 a.m. - noon
 Zero Waste Challenge for Schools, April
 Recycle Your Computer, April 1-30.
 Compost Seminar and Bin Sale in Independence, April 25, 2012.
 Poetree Contest entries due on Monday, May 7th
 Clean Up, Green Up: Removing Home-Based Hazardous Materials Seminar in Parma, May 10.
 Compost Seminar and Bin Sale in Bay Village, 5/16.
 Phone Book Recycling at various Cleveland Metroparks, June 1-September 30.
 Rain Barrel Workshop and Compost Seminar and Bin Sale June 26.

Compost Seminar and Bin Sale in Cleveland, June 12.
Cuyahoga Soil and Water Conservation District:
 Ohio Forestry and Wildlife Conservation Camp 6/10-15.

Rain Barrel Workshop, Broadview Heights April 3
 Rain Barrel Workshop, Euclid April 21.
 Rain Barrel Workshop, Bay Village April 25.
 Huntington Beach Cleanup April 28.
 Rain Garden presentation, Bay Village May 9.
 Rain Barrel Workshop, North Olmsted May 15.
 Rain Barrel Workshop, Rocky River May 17
 Rain Barrel Workshop, Independence May 30.
 Rain Barrel Workshop, Lyndhurst June 13.
 Rain Barrel Workshop, Brooklyn June 18.
 Rain Barrel and Compost Workshop, Garfield Heights June 26.

www.cuyahogawcd.org

Earth Day Coalition

EarthFest 2012 held at Cleveland Metroparks Zoo, Sunday, April 22, 10-5

Playhouse Square

Fair on the Square, Monday, April 23, 4-6 pm

Free admission and refreshments while you learn about all of the fantastic local places for field trips!

Science Café Cleveland at The Market Garden Brewery "Remembrance of Things Past: Reversing the Causes of Memory Loss That Characterizes Alzheimer's Disease" April 19

The Lake Metroparks Environmental Learning Center presents: The Eco Café is a FREE adult program held once a month March through October. Our casual coffeehouse atmosphere is a pleasant way to spend the evening while listening to many interesting and relevant topics. It's the local alternative to the Science Café in Cleveland. Wednesday nights from 7 to 8:30 pm we welcome you to visit the Environmental Learning Center. Come early and walk the facility and grounds.

Each month an expert in environmental science, a local naturalist or a citizen scientist will make a short presentation followed by an informal discussion. Some months an environmentally themed movie will be shown followed by discussion. Refreshments are served and registration is required. Register at lakemetroparks.com or call 440-358-7275.

Resources in the Community

The Educator Resource Center at NASA Glenn Research Center has a wide variety of Subject Matter Experts (SMEs) available to work with teachers and students, both as mentors and content advisors. The SMEs and the Educator Resource Center are committed to giving back to their community and sharing their knowledge with future engineers and scientists. Contact Monica Boyd at (216) 433-2004 or monica.l.boyd@nasa.gov

The Science Resource Center at the Cleveland Museum of Natural History provides year-round, *high quality, professional development* workshops for teachers. For more information regarding upcoming workshops, please visit www.cmnh.org or call (216) 231-2075.

The Cleveland Botanical Garden offers *BotaniCool® Kits* to supplement your classroom learning. Each kit contains curricula, pictures, books, activities and materials to enhance your students' knowledge of the subject. For more information, email BotaniCool@cbgarden.org or call 216-707-2820.

CoolRegistrar@cbgarden.org or call 216-707-2820.

Cleveland Metroparks Zoo is offering several summer courses for Graduate credit. Classes include: *Foundations of Inquiry, Primate Behavior and Conservation, and Environmental Stewardship in Northeast Ohio*. For more information, visit www.clemetzoo.com

Get a FREE Science Activity Kit to celebrate International Year of Chemistry (IYC) 2012. *Chemistry: Investigating Your World* kits are available for upper elementary and middle school teachers who register at: www.acs.org/iyckit

Grants for the Classroom

2012 Midwest Garden Grants

National Gardening Association is delighted to announce the third year of the Midwest Garden Grant program. They award Midwest Garden Grants to schools and community organizations with child-centered garden programs. <http://www.kidsgardening.org/grants/2012-midwest-garden-grant>

The Kids In Need Foundation and Elmer's Products Inc., an industry leader in adhesives, arts and crafts, office and educational products, offer the Teacher Tool Kit Grant Program. You can apply for an Elmer's Teacher Tool Kit grant that can range from \$100 to \$500. <http://www.kinf.org/elmers/index.php>

CAPTAIN PLANET FOUNDATION GRANTS

Dates: May 31 and September 30, 2012

Description: The Captain Planet Foundation primarily makes grants 3 times a year to U.S.-based schools and organizations with an annual operating budget of less than \$3 million. Grants are for activities that conform to the mission of the Captain Planet Foundation: to promote and support high-quality educational programs that enable children and youth to understand and appreciate our world through learning experiences that engage them in active, hands-on projects to improve the environment in their schools and communities. Grants from the Captain Planet Foundation are intended to: serve as a catalyst to getting environment-based education in schools, and inspire youth and communities to participate in community service through environmental stewardship activities. Grants: Up to \$2,500. Preferential consideration is

given to applicants who have secured at least 50% matching or in-kind funding for their program.

More Info: <http://captainplanetfoundation.org/default.aspx?pid=3&tab=apply>

DO SOMETHING GRANTS:

NO DEADLINE. *Weekly Grants Given*

Description: There are several Do Something Grants offered to youth each week: 1) Seed Grants are offered to start a community action project or program or take an existing successful project/organization to the next level. \$500 each week. 2) Project Pitch Grants are offered to take a project or organization to the next level with a strong pitch. Check out their "Do Something U" video, "How to Pitch Your Project," for tips, then upload your best pitch for a chance to win one of five \$250 grants given each month. 3) Do Something Club Grants: Grants help sustain official Do Something Clubs and their community social action projects. Five grants worth \$250 each month.

More Info: <http://www.dosomething.org/grants>

Salad Bars 2 Schools

Win a salad bar for your school! <http://saladbars2schools.org/apply>

Awards and Contests

Nickelodeon's The Big Help Greens Your School Contest

Date: March 30, 2012, *entry/nomination deadline*

Description: Nickelodeon's The Big Help know kids everywhere are doing BIG THINGS to help take care of the environment. They want to hear all about it! To celebrate Earth Day 2012, The Big Help & National Wildlife Federation are teaming up with National Environmental Education Foundation, & NEA Foundation to turn the spotlight on schools and "shout them out for cool, fun, and innovative kid-led green projects." Teachers, principals, and school administrators: Here's your chance to win some great prizes and bring excitement to kids in your community. Tell The Big Help what project your school is planning or has done to help the environment.

Eligibility: Elementary, middle and high schools (public and private) and after-school community-based programs with 501(c)(3) status in all 50 states.

Prizes: Dozens of projects will be featured online at Nick.com 10 projects will receive a \$1,000 spot award to help take their environmental project to the next level. 5 projects will receive "shout outs" on Nickelodeon

and/or Nick.com. 1 project will be chosen for a visit by Nickelodeon. In order to be considered for a visit from Nick and NWF, your project must take place between April 1st and 16th. To Enter/Nominate/More Info: <http://www.nwf.org/Get-Outside/What-We-Do/Big-Help.aspx>

CONTEST: Like A Drop of Water Essay Contest **NO DEADLINE. Six winners per month.**

Description: Like A Drop of Water's writing contest encourages youth ages 8-17 to share their ideas on how they and their countries can reduce climate change and pollution. Parents, grandparents and teachers are encouraged to share their ideas with their young authors. Teachers and their students may submit a class essay as well as serve as judges. "Like drops of water that make up the oceans, millions of people of all ages, can lead the way to creating the positive changes we need to create a sustainable planet."

Award: 6 Awards of \$50-\$100 per month through June 2015. Each year the top fifty essays will be sent to the White House and made available to governments across the world. Bi-yearly, the one hundred winning essays will be published as an e-book for world wide distribution.

To Enter: <http://www.likeadropofwater.org/entry-form/>

Official Rules: <http://www.likeadropofwater.org/official-rules/>

More Info: <http://www.likeadropofwater.org/>

Like A Drop of Water Essay Contest

NO DEADLINE. Six winners per month.

Description: Like A Drop of Water's writing contest encourages youth ages 8-17 to share their ideas on how they and their countries can reduce climate change and pollution. Parents, grandparents and teachers are encouraged to share their ideas with their young authors. Teachers and their students may submit a class essay as well as serve as judges. "Like drops of water that make up the oceans, millions of people of all ages, can lead the way to creating the positive changes we need to create a sustainable planet."

Award: 6 Awards of \$50-\$100 per month through June 2015. Each year the top fifty essays will be sent to the White House and made available to governments across the world. Bi-yearly, the one hundred winning essays will be published as an e-book for world wide distribution.

To Enter: <http://www.likeadropofwater.org/entry-form/>
 Official Rules: <http://www.likeadropofwater.org/official-rules/>
 More Info: <http://www.likeadropofwater.org/>

Professional Development Opportunities

Summer Teacher Workshop on Sustainable Energy
 Columbus June 18-20
www.occass.wordpress.com

Modeling Workshops for Summer 2012

Modeling Workshops are listed alphabetically by state. Most are three-week summer workshops that thoroughly treat the pedagogy and content for the mechanics portion of a physics course or first semester chemistry content. Content is reorganized around basic models to increase its structural coherence. Participants are supplied with a complete set of course materials and work through activities alternately in the roles of student or teacher, as they practice techniques of guided inquiry and cooperative learning. Teachers receive stipends and/or tuition waivers, instructional materials, sometimes free housing, etc., at most workshops. (State funded workshops provide these only for in-state teachers.) Generally, workshops use whatever probes and interfaces are available at the site. *Most teachers need at least three weeks of immersion in a Modeling Workshop to begin to transform their teaching, for Modeling Instruction is a complex innovation. Academic year follow-up support can be a partial substitute, as can multiple workshops in two or three successive summers. Workshop overview and sample [instructional materials](#). Workshop syllabi and daily calendar ([examples](#)).

Details about most Modeling Workshops nationwide are also at the [PTEC website](#). Workshop organizers update their own information there, so it might be more current than here.

Ask Your School District to Pay

School District "No Child Left Behind" funds (NCLB or ESEA Title II-A) can be used for "professional development activities that improve the knowledge of teachers ... in:

- (a) Content knowledge. Providing training in one or more of the core academic subjects that the teachers teach; and
- (b) Classroom practices. Providing training to improve teaching practices and student academic achievement

through effective instructional strategies, methods, and skills ..."Modeling Instruction meets the NCLB requirement of "high quality professional development that is based on scientifically-based research." Charter school teachers and private school teachers are eligible for Title II-A funds through a local education agency (LEA). Also, "Title II, Part A funds may be used to purchase materials and supplies used in professional development activities, including the materials (such as graphing calculators) that a teacher will need in order to apply the professional development in a classroom setting..." Title II funds may be used to assist teachers in meeting state certification requirements, e.g., by paying for the costs of additional required courses. Title II-A funds are FEDERAL, and they are stable each year. Next year's funds start on July 1, and you can ask for those funds to pay for modeling workshops that start after June 30. Your principal is the person to ask; he/she can contact your district Title II Coordinator and request them. Be courteous; if modeling workshops are NOT in your district's yearly plan (submitted to the State Department of Education), then you can be denied those funds -- in which case you need to get involved in deciding the use of Title II-A funds each year. We encourage you to [download this NCLB guide](#) and give it to your administrator to support your request. The bottom line is: you are probably eligible for NCLB funds, and we suggest that you ask your school or district, at minimum, for financial support for a Modeling Workshop using your local Title II funds. We suggest \$1000 as a reasonable amount for teachers to request.

Click here to download a [sample grant proposal](#) that should help you obtain funding from your district.

A Modeling Workshop can be an excellent investment for your school because you can become a valuable resource for teaching science effectively with technology!

Center for Mathematics and Science Education, Teaching and Technology—John Carroll University

A series of two and four day teacher workshops are being offered at John Carroll University in science, mathematics and technology. Optional graduate credit available. For more detailed information, visit www.jcu.edu/cmsett

Cleveland Regional Council of Science Teachers presents

2012 Spring Symposium:

A Student-Centered Classroom



Cleveland Metroparks Zoo

Thursday, April 26, 4:30 – 7:00

Do you want to learn more ways to engage your students? Do you have binders full of lessons you want to turn into student-centered learning? We'll help you! Promote critical thinking skills in your students and help them construct answers on tests. Network with your peers, gain information on local resources and select GEMS kits and guides for sale at greatly reduced prices too!

4:30 – 5:00 pm Registration, Light Supper, Networking

5:00 – 5:45 ***How Students Learn and How Teachers Teach: Integrating the Learning Sciences to Support Student-Centered Instruction***

Stephen L. Turner, Ph.D., Kent State University

Student-Centered Projects at Hershey Montessori School

5:45 – 6:00 Break

6:00 – 7:00 **The Student-Centered Classroom: Lessons & Practices**

Split into grade appropriate groups to learn and participate in student-centered activities you can use in your own classroom

Further details and information about rooms and parking will be forthcoming via emails or may be accessed at <http://www.crcst.org/>. Questions: Renata Brown, rbrown@cbgarden.org, 216.707.2820

CRCST Spring Symposium Registration

Please use one form per person, copy as needed.

CRCST Spring Symposium Registration

Please use one form per person, copy as needed.

Membership in CRCST or CRABS is required.



	<i>Fee (circle one)</i>	Make check payable to CRCST <i>Mail to:</i> Mark Waner, Dept. of Chemistry, John Carroll University 20700 North Park Blvd., University Heights, OH 44118
Symposium only (existing member)	\$10	
1 year CRCST membership & symposium (full time graduate or undergraduate student)	\$15	
1 year CRCST membership & symposium	\$25	
2 year CRCST membership & symposium	\$39	
1 year CRCST/CRABS membership & symposium	\$30	
2 year CRCST/CRABS membership & symposium	\$49	
Additional donation		

Name: _____ H Phone (____) _____

H Address: _____

City: _____ ZIP _____ Grade _____

School/Work Site _____

City: _____ ZIP _____

Phone: (____) _____ E-mail _____

***SAVE THE DATE: CRCST Fall Conference – Saturday, October 27th at the
Greater Cleveland Aquarium!**

CRCST TREASURER'S REPORT: March 7, 2012 to April 4, 2012

CRCST Balance on March 7, 2012	5,820.96
INCOME	
Memberships ()	00.00
Memberships with Symposium Registration (1)	25.00
Symposium registration only (1)	10.00
CRABS ()	0.00
EXPENDITURES	
Fall Conference deposit	(500.00)
NEOSEF (9 prizes for 7-8)	(600.00)
TOTAL EXPENDITURES	(1,100.00)
CRCST Balance on April 4, 2012	4,720.96

GEMS TREASURER'S REPORT: March 7, 2012 to April 4, 2012

GEMS Balance on March 7, 2012	6,369.58
INCOME No Activity	
TOTAL INCOME	0.00
EXPENDITURES No Activity	
GEMS Balance on April 4, 2012	7,729.58
Mary K. Evans, Treasurer	



John Milam, co-editor
20700 North Park Blvd
University Hts, OH 44118