



## 2013-2014 School Nominee Presentation Form

### **PART I - ELIGIBILITY CERTIFICATION**

#### **School and District's Certifications**

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes one or more of grades Pre-K-12. (Schools on the same campus with one principal, even a Pre-K-12 school, must apply as an entire school.)
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental

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and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

ED-GRS (2012-2013)

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U.S. Department of Education Green Ribbon Schools 2013

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Charter  Title I  Magnet  Private  Independent

Name of Principal Mrs. Sangeeta Bella

Official School Name Interdistrict Discovery Magnet School  
School Mailing Address 4510 Park Avenue

Bridgeport CT 06604  
City State Zip  
County Fairfield State School Code Number\* 0153711  
Telephone ( 203 ) 275-1804 Fax (      )  
Web site/URL bridgeportedu.net E-mail sbella@bridgeportedu.net

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

Sangeeta Bella  
(Principal's Signature)

Date 1/21/14

Name of Superintendent\* Mr. Paul Vallas

District Name\* Bridgeport School District Tel. ( 203 ) 275-1000

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate. This is one of the highest performing green schools in my jurisdiction.

Paul Vallas  
(Superintendent's Signature)

Date 1/17/14

*\*Private Schools: If the information requested is not applicable, write N/A in the space.*

## **PART II – SUMMARY OF ACHIEVEMENTS**

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### **Instructions to School Principal**

Provide a concise and coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts in approximately 800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of

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the title U.S. Department of Education Green Ribbon School.

### **PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE**

#### **Instructions to Nominating Authority**

The Nominating Authority must document schools' high achievement in each of the three ED-GRS Pillars and nine Elements. For each school nominated, please attach documentation in each Pillar and Element. This may be the Authority's application based on the Framework and sample application or a committee's written evaluation of a school in each Pillar and Element.

#### **Nominating Authority's Certifications**

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes one or more of grades Pre-K-12. (Schools on the same campus with one principal, even a Pre-K-12 school, must apply as an entire school.)
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating  
Agency

Connecticut State Department of Education

Name of Nominating  
Authority

Dr. Stefan Pryor, Connecticut Commissioner of Education

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

  
(Nominating Authority's Signature)

Date 1-17-14

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to [green.ribbon.schools@ed.gov](mailto:green.ribbon.schools@ed.gov) according to the instructions in the Nominee Submission Procedure.

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OMB Control Number: 1860-0509  
Expiration Date: February 28, 2015

### Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

#### School Contact Information

School Name: Interdistrict Discovery Magnet School \_\_\_\_\_  
 Street Address: 4510 Park Avenue  
 City: Bridgeport State: CT Zip: 06604  
 Website: [bridgeportedu.com](http://bridgeportedu.com) Facebook page: N/A  
 Principal Name: Mrs. Sangeeta Bella  
 Principal Email Address: [sbella@bridgeportedu.net](mailto:sbella@bridgeportedu.net) Phone Number: 203-275-1804  
 Lead Applicant Name (if different): [mservino@bridgeportedu.net](mailto:mservino@bridgeportedu.net)  
 Lead Applicant Email: [mservino@bridgeportedu.net](mailto:mservino@bridgeportedu.net) Phone Number: 203-275-1801

Level <input type="checkbox"/> Early Learning Center <input checked="" type="checkbox"/> Elementary (PK - 5 or 6) <input checked="" type="checkbox"/> K - 8 <input type="checkbox"/> Middle (6 - 8 or 9) <input type="checkbox"/> High (9 or 10 - 12)	School Type <input type="checkbox"/> Public <input type="checkbox"/> Private/Independent <input type="checkbox"/> Charter <input checked="" type="checkbox"/> Magnet	How would you describe your school? <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural	District Name _Bridgeport School District_ Is your school in one of the largest 50 districts in the nation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <hr/> Total Enrolled: 524
Does your school serve 40% or more students from disadvantaged households? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	% receiving FRPL 100 % % limited English proficient _____ Other measures _____	Graduation rate: N/A Attendance rate:	

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*Summary Narrative:* Provide an 800 word maximum narrative describing your school's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

1. Is your school participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?

(X) Yes ( ) No Program(s) and level(s) achieved: Project Learning Tree

2. Has your school, staff or student body received any awards for facilities, health or environment?

( x) Yes ( ) No Award(s) and year(s) LEED Gold for Schools, 2013 ; Mary Servino honored as 2012 Presidential Award of Excellence in Mathematics and Science Teaching

Discovery Interdistrict Magnet School serves 524 students from PK to grade 8. 100% of our students receive free breakfast and lunch. Located in Bridgeport, one of the poorest urban areas in Connecticut, the school offers students a learning environment that is rich in outdoor and field experiences.

Partnerships with environmental organizations bring Discovery School students to sites such as the Maritime Aquarium, the Audubon Society, the Beardsley Zoo, and the Discovery Museum, and more. Each of these experiences is extended to allow students to apply what they learned in our 90 acre urban woods. Students learn many lessons through hands-on work, including our Sustainable Garden, raising trout in the classroom, and our Discovery School BioBlitz. The school includes a culture of students teaching students, with older grades sharing information from their studies with their younger peers.



Fig. 1 Trout Project Quilt, Created by Discovery School Students

Fig. 2 Releasing Our Trout 2013, with Mayor Bill Finch

Health and wellness are encouraged with daily activity, outdoor learning, lessons about nutrition and health, and participation in our Sustainable Garden, growing vegetables and teaching our families about organic gardening.

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Discovery Interdistrict Magnet School is a LEED Gold facility, with an extraordinary building. From our rooftop 37.2 kW solar photovoltaic system, to our low flow appliances, students are able to use green technology while they learn about green. All classes participate in daily science lessons, receiving from 3-5 hours of instruction per week across a broad curriculum. Accomplishments are celebrated in our Family Science Nights, at the yearly science fair, and students publish articles in our electronic journals. Our students learn about green through our many activities, outside classroom lessons, and research projects.

Discovery School is working hard to be an exemplary green community, to share sustainability with our students and their families, and to grow a greener culture in our district.

### Step 1: Green and Healthy Outlook

Key Elements: Participate in CT Green LEAF Schools activities and report on your progress. Maintain a Green Team at your school. Participate in a nationally recognized green school program. Utilize the NAAEE Guidelines for Excellence. Develop partnerships with the local community. Act as a mentor for other schools. ([Green Ribbon School Program – Cross-cutting Questions](#))

Interdistrict Discovery Magnet School is housed in a LEED Gold rated building on a large open space in a very urban community. All of these factors work together to make IDMS a unique community. Our curriculum has a strong environmental theme, supported by partnerships with local environmental educators, including the Discovery Museum, Fairchild-Wheeler School, the Connecticut Audubon Society, Connecticut's Beardsley Zoo, the Maritime Aquarium, and the Bridgeport Lighthouse after school program.

Many of our staff have been trained in Project Learning Tree and implement those lessons in the classroom. Our school Science Specialist actively seeks professional development, partnerships, and opportunities to help to grow our programming. Each teacher receives monthly formal science PD, and the specialist works directly with each grade level monthly in their team planning. Lessons are regularly integrated, with classes combining writing skills, science topics and research, and mathematical use of data.

We have a growing green focus, with an active green team comprised of educators, administrators, and facility staff. Our student council supports and initiates green activities, including our recycling program. Bridgeport School District supports our work, most notably by reinvigorating its Tools for Schools program, and a close relationship with our facilities staff.

Staff are encouraged to attend science conferences, and are participating in the Connecticut Green LEAF program offerings. Our goal is to have the staff trained in wide variety of programs that will help create a greener and healthier school.

Our school is in full compliance with Connecticut's comprehensive school environmental laws, including green cleaning, pesticide use, vehicle idling, recycling and radon testing.

### Step 2: Environmental and Sustainability Literacy

Key elements: Incorporate environmental and sustainability literacy into the curriculum and instructional practices. Measure outcomes of environmental and sustainability education efforts and assess student

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literacy in these areas. Support learning with professional development for all staff. ([Green Ribbon School Program Pillar Three – 3A, 3B, 3C](#))

Environmental and sustainability literacy are supported throughout our curriculum. PK-grade 2 classroom study science for 30-45 minutes daily. Grades 3-8 have science an hour a day. IDMS students have a well-integrated, standards based curriculum in science that helps to support a climate of wonder in our students. Lesson units include:

Kindergarten: Properties of Matter; Weather; Natural and Manmade Objects; Living Things

Grade 1: Science and Technology; Sun, Moon and Stars; Structures of Living Things; Life Cycles

Grade 2: Scientific Experiments; Nutrition; Earth Materials; Plants

Grade 3: Properties of Materials; Measuring; Natural Resources Conservation; Organisms and Environments

Grade 4: Water Cycle; Electricity; Machines; Biotic and Abiotic Features of Environments

Grade 5: Sound; Light; the Brain and Senses; Planetary Science

Grade 6: Chemical Interactions; Ecosystems; Weather; Land and Water

Grade 7: Landforms and Earth History; Body Systems; Newton's Laws; Food Production

Grade 8: Solar System; Forces and Motion; Designing Structures; Reproduction

Our classroom curriculum is supported and enhanced through work with our partners. All of our students participate in programs with the Maritime Aquarium, learning about our neighboring Long Island Sound and the importance of human conservation of these marine resources. To help our urban students understand and interact with our school's extraordinary open space, Grades 3-8 work with the Connecticut Audubon Society and their Science in Nature program, learning about biomes and data collecting skills which they then use in the Discovery woodlands BioBlitz (Fig. 3). Grades 5-6 take these skills further through work with the Beardsley Zoo, learning about local fauna and biodiversity. They apply this by creating data about our biome and photo journals about local animals. Our 6<sup>th</sup> graders are also raising trout eggs to be released in the local river in May. Through this program they also share what they have learned about ecosystems, habitats and lifecycles with younger students. The entire school also participates in the annual science fair held in January.



Fig. 3 Discovery School BioBlitz, 2013

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Our school shares our site with the Discovery Museum and participates in many joint programs. These include KIDS, a monthly experience for kindergarteners that creates connections with suburban students; SPLASH, where our 4<sup>th</sup> graders learn about underwater environments, including building and operating underwater remote vehicles.

Much of our curriculum is held outdoors, including Project Learning Tree lessons. Classes also work with local master gardeners, learning about food growing in our Sustainable Garden. All of our sixth graders go to the Nature's Classroom program. This 5-day, 4-night program is a highlight of the year for our urban students, many of whom have not had such experiences as going on an owl walk at night, or living in the woods.

An example of one of our green lessons, our "Zoo Kids" program, shows how our curriculum is putting science into student's hands and hearts. The Beardsley Zoo staff started work with our 6<sup>th</sup> graders last year, with lessons taught at both the Zoo, and in our school woods. Students learned about biodiversity, habitats and ecosystems. They put that learning to work when they led our school BioBlitz, cataloging species from our school habitat, creating an electronic field guide as they identified the plants and animals. Those students went on to create partnerships with each student working with a second grader, helping that student to select a tree in the woods to adopt. Older students helped their younger partner as they identified the tree, recorded scientific observations in their science notebooks, made measurements and estimate the height of their tree. Extending the learning, and sharing their knowledge, the older students are now learning about animal tracking in the woods. Their next step will be to partner with third graders to teach them tracking skills. Together the classes will work with the data they collect to make seasonal habitat guides, and to place donated motion-triggered cameras to capture images of the habitat residents.

Discovery has partnered with the new Bridgeport Fairchild Wheeler Interdistrict Magnet School, creating a bridge program where Discovery Schools will be accepted to this high-intensity STEM high school to further their studies in Information Technology, Zoological/Biotech, or Aerospace/Hydrospace and Engineering. Many of our students also participate in the Lighthouse Program, an after school enrichment, held at the Discovery School, offering academic support, and science and physical activities. Lighthouse participants continue to care for our Sustainable Garden, maintaining and harvesting vegetables throughout the summer.

Throughout the year we get Discovery families and the community involved in science exploration, offering nights of science for the entire family. Last year's topics were astronomy, what lives in Long Island Sound, and Celebrate Earth Day. Each night offers many stations that focus on each topic that are for all ages and kid-friendly.

### Step 3: Healthy School Environment

Key elements: Implement and actively maintain EPA's Indoor Air Quality Tools for Schools program. Comply with or exceed all CT school-based environmental health laws. Incorporate environmental health issues into the curriculum. ([Green Ribbon School Program Pillar Two – 2A](#))

Narrative (maximum 1000 words):

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On June 10, 2013, the Discovery Magnet Elementary School was awarded LEED for Schools, Gold status, having earned a total of 51 points under the LEED v2 requirements. As such, the building is integrated with many features and systems that support a healthy school environment.

Discovery Magnet is sited close to neighborhoods and public transit, encouraging students and families to use these transportation routes. The building provides bike storage for biking students and staff. The grounds provide more than 125,000 sq ft of open space. The building uses reflective materials on its roof to reduce “heat island effect.” Lighting from the building and its exterior is decreased at night to reduce light pollution. The building provides for community shared use of its cafeteria, gym, and multipurpose room.

The building provides for good ventilation and air quality. Low VOC emitting materials were used for its paints, flooring, and wood products. 94% of Discovery Magnet’s occupants can control their lights to meet their needs, including supporting AV use in classrooms. The design provides for good daylighting and low background noise.

Discovery Magnet earned 5 LEED innovation points, including awards for its green cleaning policy, maximizing its outdoor open space (90 acres, and 91% of the total site), reducing impact of mercury in its lighting, and including the building features in its curriculum. Education at Discovery Magnet includes human and natural ecologies, the features of the building, and integration of an energy and features dashboard system.

Discovery School’s participation in the Connecticut Green LEAF program has helped the district to reinvigorate its Tools for Schools program. Discovery’s green team and student council will partner to support this school initiative and to continue to use the school as a teaching tool. Discovery Magnet and Bridgeport School District collaborate with the health department on environmental issues. Buses and vehicles don’t idle on school grounds. Landscaping and gardens do not require pesticides.

Discovery School is helping our urban student population to learn about healthy nutrition and to take that message home to our families. Through a partnership with the Green Village Initiative (GVI), a local garden initiative that promotes school gardens and food justice issues, more than 50 students and their family members got together to learn about and build our school garden. GVI has supported many of our grades, including lessons with second graders on how to manage our school composting, and using compost tea to feed healthy plants. They worked with students to grow tomato, radish and lettuce seedlings at the school to plant in the garden, and helped us to start an atrium nursery and our new hydroponics system. Students will be starting seedlings this winter to create an “adopt a tomato” initiative in the spring, with participants to be given container gardens with tomatoes and cilantro to take home. Students will work with the master gardeners to learn about how to grow these plants, to write booklets about the history, culture, and growing needs of tomatoes, and to develop an information session to teach their families about organic container gardening.

### Step 4: Healthy Nutrition

Key elements: Comply with the nutrition standards in National School Breakfast and Lunch Programs. Encourage healthy eating in your school including vegetarian and vegan options, and use of local, organic foods. Incorporate healthy nutrition into the curriculum. ([Green Ribbon School Program Pillar Two – 2B](#))

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Discovery School participates in the Bridgeport School District food service program, with healthy meals delivered to the school. All of our students receive free breakfast and lunch, and our afterschool program receives snacks, too. The District wellness policy includes a commitment to explain and reinforce healthy eating and physical activity habits.

The school includes the District's commitment to student's health, with daily activities, curriculum, partnerships and messages to our families. Signs in the cafeteria support the concepts and practice of healthy nutrition and physical activity. Nutrition is included in our curriculum across the grades, and partners from neighboring Sacred Heart University help teach about hygiene, nutrition and health.

Classes grow vegetables and maintain our Sustainable Gardens, harvesting vegetables for eating and to be sent home to Discovery families. Students work alongside master gardeners through a partnership with the Green Village Initiative, learning about plants, composting, and good gardening practices. The bumper crop of radishes, lettuce and tomatoes last year turned into a "salad celebration," with 8 classes experiencing picking, cleaning, cutting and sampling these vegetables.

### Step 5: Physical Well-Being

Key elements: Promote physical health including outdoor opportunities for all students and staff. Incorporate physical well-being into the curriculum. ([Green Ribbon School Program Pillar Two – 2B](#))

All Discovery School students participate in 20 minutes per day of outdoor activity, weather permitting. Gym classes are held weekly for all grades. After school programming, which many students participate in, include sport and outdoor activities, along with nature and science enrichment.

Students take part in activities such as Adventure Climbing on our climbing wall, learning team building and trust while getting active and having fun. Class competitions include Jump Rope for Life. Health lessons have been extended, learning about diabetes care, prevention, and awareness, coupled with a diabetes fundraising event that will have one of the fifth grade teachers winning the "kiss a pig" honor.

Classes regularly use our open space as an outdoor classroom. This is particularly significant with our school's population of urban students. Through outdoor lessons, they gain an appreciation for the local flora and fauna, along with daily outdoor activity.

### Step 6: Energy Efficiency and Water Conservation

Key elements: Complete Energy Star Portfolio Manager Benchmarking for your building. Implement a plan to measure and reduce energy (including from transportation), greenhouse gas emissions and water use while improving water quality. Use renewable energy sources. Encourage energy efficient



Fig. 4 Discovery School BioBlitz

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transportation to and from school by students and staff. Incorporate energy and water issues into the curriculum. ([Green Ribbon School Program Pillar One - 1A, 1B, 1D](#))

Discovery Magnet Elementary School was awarded LEED for Schools, Gold status, having earned a total of 51 points under the LEED v2 requirements. The school was designed to use 39% less energy than code standard. The building was constructed with high efficiency windows, lighting controls and sensors, and equipment. Its air conditioning system is highly efficient. The 37.2 kW rooftop solar photovoltaic system provides for 19% of the school's electric use, 45,067 kWh per year.

Energy and water are included in the curriculum and students can access building features and energy information through our lobby dashboard system.

Discovery School was designed so that exterior landscaping would not require irrigation. Interior water use is reduced by 44% over similar buildings, due to installation of dual-flush toilets and low-flow appliances. Furnishings and building materials included 11% recycled content. 18% of materials used were sourced from 500 miles away or less. The building provides for good ventilation and air quality. Low VOC emitting materials were used for its paints, flooring, and wood products. 94% of Discovery Magnet's occupants can control their lights to meet their needs, including supporting AV use in classrooms. The design provides for good daylighting and low background noise.

Our fifth graders are working to research the building features, create signage to teach about the unique green technologies, and to publish an online magazine to explain how Discovery is a green school. The students will be learning about green jobs through conversations with the project manager, landscape designers, and the architectural team that built the school.

Our no idling policy is enforced on the grounds, including both our busses and carpool vehicles. The school has a limited hard-scape parking area, with overflow parking for events on a specially designed permeable lot.

### Step 7: Green Purchasing and Waste Management

Key elements: Assess our building's purchasing policies and waste production. Implement a green purchasing policy and plan to measure and reduce waste. Incorporate purchasing and waste management issues into the curriculum. ([Green Ribbon School Program Pillar One – 1C](#))

Discovery earned an extra innovation point under the LEED certification for its Green Cleaning Policy, using all Green Seal cleaners. The building was designed to reduce the maintenance needs using low-care green materials.

Student Council members regularly communicate with Discovery families through electronic newsletters. The council has also reinvigorated our recycling program, promoting and teaching about single stream collection, and encouraging participation. Classrooms each have a student recycling leader. The council is also implementing a plan to weigh and measure trash in the cafeteria, to create the baseline for a reduction contest. Students have started a composting program, collecting lunch scraps.

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Materials use and waste management is included in our curriculum, in grades 2, 3, 6, and 7. Third graders will be learning about green cleaners and sharing this information with their families. The lessons include learning about “green washing” and advertising, comparing homemade cleaners and commercial products by learning to do scientific fair tests, calculating costs and potential savings by using less expensive cleaners, and presenting their data and information to teach others. The students will be teachers at the Earth Day Science Night, sharing posters, videos, and demonstrating cleaners and their research.