



2013-14 Submissions



39 schools applied to participate in the inaugural year of the Green Schools Quest. 24 of these schools submitted results of their projects for review by an impartial panel of judges. Please join us in celebrating ALL participants of the 2013-14 challenge!

ELEMENTARY

NATIVE BUTTERFLY GARDEN

School Name: *A Growing Place Montessori School*

Mentor Name: *Susan Lanigan*

Kindergarten students planted seeds for a butterfly garden in a raised bed created by volunteers. They learned about the benefits of using native plants and created signs to draw the attention of passersby to their work. Overall, the no cost project converted 5% turf to native plantings.



THE HELPING FRIENDLY KINGDOM TREE SAVERS: A PLAY

School Name: *Children's House Montessori*

Mentor Name: *Jessica Scott, University of Missouri*

Concerned about the school's paper waste, these kindergarten students wrote a play to educate other students about conservation. They devised a plot, created the set, and planned their costumes. The audience was so receptive to the message, that the class has begun working on their next play about water conservation.

GARDEN QUEST

School Name: *Christ Prince of Peace*

Mentor Name: *Susan Maag, SLM Consulting, LLC*

These students began their quest by raising money and awareness through the PTO and The Knights of Columbus. At a standstill due to the weather, they continued their quest by resupplying their compost pile with Red Wiggler Earthworms and creating ornaments from trash. Once the weather warms, they will have a fundraiser to purchase butterfly friendly plants for their garden.



EXPLORING SOLAR ENERGY

School Name: *Forsyth School*

Mentor Name: *Cindy Bambini, Brightergy*

This year each grade level incorporated solar energy into their science curriculum. Younger students learned about "The Story of Coal," while older students studied the solar system and the elements. Supplemental activities included making solar ovens, solar car races, solar energy picture books, speaker presentations and fieldtrips. Channel 4 heard about their efforts and showed a short segment about their quest.



1st Place

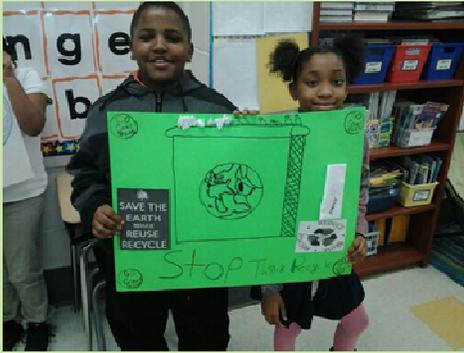
The **Green Schools Quest** is a challenge issued by the U.S. Green Building Council-Missouri Gateway Chapter to public and private schools within the chapter's territory (Missouri and southern Illinois) to devise and implement, with the help of green mentors, the most creative, effective and no or low cost sustainable practices for their schools. For more information, please visit www.usgbc-mogateway.org/green-school-quest/ or contact Hope Gribble, Green Schools Coordinator, at (314) 577-0225.

GREEN TEAM WOOD REUSE

School Name: Glenridge Elementary

Mentor Name: Mike Mueller, Carpenters Joint Apprenticeship Program

Last summer, a dilapidated wooden stage on the school grounds was torn down. Students decided they wanted to repurpose the wood, but how? After brainstorming about the environmental pros and cons of different suggestions, they decided on birdfeeders. Over the course of the year, 80+ students had a chance to participate in their design and construction.



BEHAVIOR CHANGE: LEARNING THE 3R's

School Name: James A. Avant Elementary

Mentor Name: Brandon Walker, Positive & Productive Innovations

The main purpose of the quest was to effect a behavior change- first in the students and then in the school community. The students learned about, and received resources on, recycling and energy and water conservation. Students placed stickers on light switches and near faucets as simple reminders, and even started up a paper recycling program.

ZERO WASTE INITIATIVE

School Name: Kennard Classical Junior Academy

Mentor Name: Mary Ann Lazarus, MAlco

This initiative centered around three main goals: education, engagement, and communication. Student Council members researched zero waste programs and put together a presentation for an all-school assembly. The Zero Waste team then put together a bulletin board, spoke with the PTO, and brainstormed waste reduction strategies. Once in place, the team will begin audits to track their progress.



SCHOOL GARDEN

School Name: Little Flower Catholic School

Mentor Name: Franklin Eppert, AFRAM Corporation

The students used the entire project as a learning experience. They decided where the garden should be located, what to grow, how to finance the project, how to get the supplies, and what the overall purpose of the project was. In addition, the students collected compost from the cafeteria for use in the garden, and plan to incorporate the produce grown into school lunches.

KINDERGARTEN OF CHANGE: RECYCLING PLASTIC BAGS

School Name: Mann Elementary

Mentor Name: Alyse Garbisch, HOK

After researching what types of trash goes into landfills, the students at Mann decided to target plastic shopping bags. They collected bags from their schoolmates to recycle, and also used them to create pie charts on the composition of landfills. In addition, students hung signs around the school asking others to conserve water and turn off the lights.



SOLAR TINKERING SCHOOL



School Name: Meramec Elementary

Mentor Name: Jessie Hoagland, Green Spiral Tours

Upon seeing the installation of solar panels at their school, the students were left wondering- what can solar do? They then inventoried science kits, searched for tinkering parts, and invited solar reps to come and discuss their idea of playing with solar. As a result of the quest, solar tinkering has become part of the standard fourth grade curriculum.

CURBING FOOD WASTE

School Name: MICDS Lower School

Mentor Name: Ron Morlen

After observing how much waste is generated on a daily basis in the cafeteria, students decided to do something about it. The students began to weigh and record the food waste to raise awareness among their schoolmates. They also made a commercial about their findings. They are hopeful that this project will continue on into future years and that their message will spread to the entire school community.



RAIN BARREL WATER CONSERVATION

School Name: Maplewood Richmond Heights Early Childhood Center

Mentor Name: Carolyn Green, Green Design

After discussing best water practices, students decided that something should be done about the water runoff from the school shed. As they already had a garden, they decided to construct a rain barrel to help water it. They designed the system, calculated how much water they could collect and helped put it in place. They now use the rain barrel to reflect upon the importance of water and educate other students.



IMPROVING GREEN COMMUNICATION

School Name: New City School

Mentor Name: Becky Finch, Microgrid Solar

At New City School, many green projects were already in place, people just didn't know about them. As a result, they decided to improve communication efforts to educate school families. They compiled an environmental timeline of the school, added green news on their website, and used open houses to showcase their initiatives. They initiated a green school tour and put on their first annual Green Fest to show others just how much green means to them.



INTRODUCING THE TRASHFORMERS CLUB

School Name: Rose Acres Elementary

Mentor Name: Mary Kay Campbell, St. Louis Green

The Trashformers Club began as an effort to increase recycling and decrease waste sent to landfills. Students created posters full of recycling facts and art made from trash to display around the school. To further their efforts, they began collecting juice pouches for TerraCycle and organized a "Cans Count Contest," getting the entire school involved.



3rd Place

3 PARTS—SUSTAINABILITY MAP, COMMUNICATION, RECYCLING

School Name: *Tillman Elementary*

Mentor Name: *Nancy Nafe, Nafe & Associates*

What does sustainability really mean? These students were eager to find out. First, they went around the school grounds and dreamt up all the green possibilities, collecting them in one cohesive map. Second, to communicate their new knowledge with others, they created a sustainability section in the school's newsletter. Lastly, they upped their recycling efforts, specifically tackling cafeteria waste.



2nd Place



RAIN WATER RUNOFF

School Name: *Valley Park Elementary*

Mentor Name: *Michael Kulik, Enterprise Holdings Inc.*

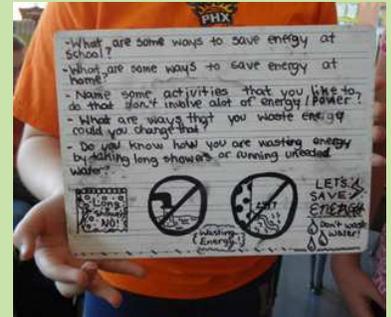
Because the Valley Park area is prone to flooding, students decided to focus their quest project on stormwater runoff on school grounds. After learning about the benefits of rain gardens, they began educating their fellow students through posters and diagrams. While not yet in place, they designed and mapped out all of the details for their future rain garden.

ENERGY CONSUMPTION EDUCATION AND REDUCTION

School Name: *W.W. Keysor Elementary*

Mentor Name: *Sam Welge, M360*

The students' focus was two-fold: conserve resources and save money. Luckily, their focus lined up perfectly with the fifth grade curriculum. They created a timeline, collected data about electrical practices, and developed lessons and activities for use by other students (mini-movies, songs, Jeopardy games, etc.). To spread the word about energy conservation, they utilized Facebook, televised morning announcements, and even created a brochure.



3rd Place



WATER CONSERVATION CHALLENGE

School Name: *Governor French Academy*

Mentor Name: *Mary Fitzgerald*

Through a school-wide poster campaign, students chose to educate their fellow schoolmates on water conservation. To discourage plastic bottles, they installed a refill station in the cafeteria and promoted the use of metal water bottles. They also began collecting partially used bottles to water plants, and installed rain barrels for use in the school's garden.

MIDDLE SCHOOL

3rd Place

ENERGY CONTEST

School Name: *Maplewood Richmond Heights Middle School*

Mentor Name: *Katherine Golden, Missouri Botanical Garden*

To get the entire school involved, students created a contest. Those classrooms that turned off lights and other electronics when not in use earned points. Classrooms were visited randomly and the points were tallied up. The winners earned themselves a pizza party and a coal-burning power plant tour. At the end of the contest, an overall reduction in energy consumption was noticed.



COMPOST CLUB

School Name: Nipher Middle School

Mentor Name: Michelle Rook

Each Tuesday students collected food waste from school lunches to be composted in a bin built of donated recycled pallets. Students spread the word to other students through the use of announcements during homeroom and flyers. Because the program didn't take off as expected, students are reassessing their efforts, renaming the club and researching student interest. They've begun to diversify activities by creating seed pots and taking over a bed in the school's garden.



3 PARTS—COMPOSTING, IDLING REDUCTION, ENERGY USE

School Name: North Kirkwood Middle School

Mentor Name: Todd Bundren, Lawrence Group

First, students purchased bins for cafeteria waste and educated students and staff on what is compostable. Second, the students researched the ill effects of idling and posted No Idling signs in each parking lot. They created an online pledge for parents to sign and gave out giftcards to those found complying. Lastly, they created little reminders for each classroom about turning off the lights, and came up with a proposal for installing light sensors. Channel 4 even featured their efforts in a short news segment.



TRANSFORMING TRANSPORTATION

School Name: The College School

Mentor Name: Ralph Bicknese, Hellmuth + Bicknese

After reading through 101+ Ways to Green Your School, students decided to focus on transportation. They started by surveying the school to find out how many students carpool, walk, or bike to school. Then, they analyzed the data to see how much gas is typically used each year. They presented this information to their school community and asked for input. They found that safety concerns play a major role in utilizing alternative transportation, and are bringing in speakers to address the issue.



COMMUNITY GARDEN

School Name: Parkway Central High School

Mentor Name: Erik Lueders, Parkway School District

Operation 350, the student environmental group, designed and constructed all aspects of the garden- the location, the plants, the materials, etc. To get other students involved, they teamed with FACS, Art, NHS, and the science teachers. FACS agreed to use the produce in future cooking classes, art created posters to raise awareness, NHS decided to allow work in the garden as community service hours, and teachers promised to incorporate the garden into their curriculum.

HIGH SCHOOL



ENERGY AND WATER AUDITS

School Name: Saint Louis University High School

Mentor Name: Ross Watson, Jacobs Engineering

Overview: Students at SLUH recognized that, while historic, the main building could use a conservation renovation. They registered SLUH with ENERGY STAR Portfolio Manager, conducted audits, and negotiated with maintenance staff as to which projects would be both cost-effective and approachable for the quest. The end result was the insulation of the hot water pipes outside of the boiler room.

