



2014-2015 School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

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 grades Pre-K-12.
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 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 and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2014-2015

Charter Title I Magnet Private Independent

Name of Principal: **Mrs. Susan Sewell**

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: **Columbus Elementary-Discovery Charter School**

(As it should appear on an award)

Official School Name Mailing Address: **200 Fuller Street | Columbus, Wisconsin 53925**

(If address is P.O. Box, also include street address.)

County: **Columbia** State School Code Number *: **1183**

Telephone: **920-623-5952** Fax: **920-623-6026**

Web site/URL: www.discoverycharter.net www.columbus.k12.wi.us/ces E-mail: ssewell@columbus.k12.wi.us

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

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

Date: **01/16/15**

(Principal's Signature)

Name of Superintendent: **Dr. Bryan Davis**

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)



District Name: **Columbus School District**

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

Date: **01/16/15**

(Superintendent's Signature)

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 grades Pre-K-12.
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: **Wisconsin Department of Public Instruction**

Name of Nominating Authority: **State Superintendent Tony Evers, PhD**

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

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

Date: **January 26, 2015**

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent "snapshot" that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and nine Elements. Then, include documentation and concrete examples for work in every Pillar and Element.

SUBMISSION

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 according to the instructions in the Nominee Submission Procedure.

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 and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

**U.S. Department of Education Green Ribbon Schools
Summary of Achievements
for
Columbus Elementary-Discovery Charter School**

Columbus Elementary-Discovery Charter School (CEDCS), located in rural Columbus, Wisconsin, serves all the community's students for kindergarten to third grade. Within this one building, two educational programs are provided. Although the majority of students participate in a more traditional approach to primary education, approximately a quarter of the students who have a natural affinity for science and nature take a more experiential approach to education through the Discovery Charter School (DCS) program. These teachers and students lead the charge in green schools education and "growing" healthy students for the entire school population. Visitors to CEDCS notice immediately that environmental science is a part of each child's school experience. Plants, fish, songbird taxidermies, Yurtle the pet turtle, student-created nature murals and an extensive recycling center set the stage for student learning. CEDCS recognizes that providing a "Green and Healthy" school environment contributes to an increase in student achievement. By taking action to reduce environmental impact and costs, increase health and wellness, and increase effective environmental education, CEDCS strives to empower their students to be deeply committed to caring for the world around them.

Pillar I: Reduced Environmental Impact

One of the goals of CEDCS is to use its school as a "learning laboratory" for energy education, while finding ways to reduce its energy consumption. At the forefront of this goal is the involvement of students in energy-related changes taking place around them. A prime example is the comprehensive energy efficiency project that took place over the past two years. CESA 10 completed an assessment and prioritized several energy-saving projects including reconfiguring the HVAC, including efficient boilers, unit ventilators and an upgrade of heating and cooling controls to limit peak demand and maximize unoccupied energy use. The HVAC work took place during school days, which allowed students to watch as their school was being renovated to be more energy efficient. Rather than seeing the project as a disruption, it was used to extend student learning about how the project would reduce energy, capitalizing on the natural curiosity of young learners. When the gym doors were replaced with tight-fitting energy saving doors, students were taught about how this would save energy. Once the doors were installed, the students gave a "shout out" in honor of the new doors! Upcoming projects will include a complete lighting upgrade with occupancy sensors and the remodeling of a 1952 bathroom. These projects will be used to teach students about the impact that they will have to make our school greener. Other examples of using the school as a learning lab include the use of solar panels in the indoor atrium to power a water feature and another to provide light near the parking lot and playground. The purchase of a water-bottle filling station was the culmination of a month-long study about ways to save water. Students continuously find ways to reduce their own energy use, and share their ideas with others. Many of the initiatives at CEDCS have started with ideas from students.

Pillar II: Improved Health & Wellness

Improved health and wellness contribute to student learning, and this belief is at the heart of how CEDCS does business. Students in the DCS program start seeds in the greenhouse, which eventually are planted into the school's raised bed gardens and in plots at the community garden. These vegetables find their way to school lunch, being added to the salad bar. These vegetables are popular with students, since they had a hand in raising them. The school's physical education curriculum centers on personal fitness. A favorite unit focuses on how the heart works. The "heart course" is an obstacle course in which students move through in a manner similar to how blood circulates in the body. Listening to the understanding that students have relative to their body is a testament to the meaning students derive from these types of activities. The spring of the year is a busy time in terms of encouraging students to get more exercise. The school's annual walking program challenges students to log their miles on the school track, which results in a celebration of the total miles walked as a school. In addition, a walk and bike to school event gets the entire community

involved. Local officials join students as they walk or bike.

Pillar III: Effective Environmental and Sustainability Education

Students in both the traditional and DCS education programs have environmental education as a regular part of the curriculum. Outdoor education sites such as school gardens, greenhouse and community sites, local woodland, the Crawfish River, community garden, a local wetland, and the nearby International Crane Foundation are used to further student learning. Environmental education in the classroom is integrated in inquiry units where students study science-related topics of their choice and create projects sharing what they learned. At the center of these opportunities is building an awareness of the environment and the importance of sustainability.

Each day, the school's All-School Morning Meeting has an environmental education focus, encouraging students to notice changes in their environment, and further encouraging them to engage in actions that contribute to the sustainability of their surroundings. For example, a yearlong study focused on an ailing Norway spruce tree located next to the school's parking lot. This study increased students' knowledge of trees, but more importantly, involved students in decision-making about what to do with the tree. A school-wide vote determined that the tree would be cut down and the wood used to create tables and benches for the school library. Watching the cutting of the tree and the sawing of the logs was exciting to students and provided a venue for further classroom study.

Cross-Cutting Questions

The City of Columbus was one of the first municipalities in Wisconsin to become an Energy Independent Community by pledging to work toward generating 25 percent of its electricity and transportation fuels from renewable resources by 2025. CEDCS has partnered with the city on projects, such as solar panels, and tree plantings, and will continue to do so in the future. Students take an active role at the city's annual energy fair. At last year's fair, students demonstrated their windmill projects they had constructed during their afterschool Energy Club.

CEDCS is recognized as a "Sugar Maple" School through Green & Healthy Schools Wisconsin and is a nationally certified PLT *GreenSchool!* In addition, CEDCS is a member of the state's Green Schools Network. In partnership with this organization, the staff hosted a 2014 summer institute to help other teachers use the environment as a context for learning and have plans to host a second institute this summer. The institute brought teachers from throughout the state together to engage in environmental science in a pristine wooded setting.

Scoring and Highlights:

The complete state application is too long to include in this nomination submission, so the applicant's information has been summarized in the following pages, aligned with the pillars and elements. Each application was ranked by teams of external reviewers and internal reviewers, each with different areas of expertise, using a common ranking tool. In addition, the slate of nominees was forwarded to related state and federal agencies to ensure there were no compliance or regulatory issues.

Columbus Elementary-Discovery Charter School serves 355 students, and has 43 staff. The Columbus School District has three school buildings (elementary, intermediate, high school).

The summary of the nominee's achievements as reported in their application is presented in each pillar and element below. The focus area is in reference to Wisconsin's application structure.

Pillar I: Reduced Environmental Impact

Element 1A: reduced or eliminated green house gas (GHG) emissions

Focus Area: Energy

The school conducted an energy in September 2008 with their local utility, Columbus Water & Light/WPPI Energy, and again in March of 2014 through CESA 10 Statewide Facilities Management Detailed Report.

ENERGY STAR Portfolio Manager is updated at least annually by our utility's energy services representative. School developed an Energy Policy Plan in March, 2014 with CESA 10.

After CESA 10 facilitated an audit this past year, a major overhaul was completed on the HVAC system for the building. Existing boilers were removed and replaced with condensing style boilers to allow for low water temperature operation. The domestic hot water heater was also replaced with a higher efficiency model. New piping for the new system was installed. Variable Speed Drivers on pumps were installed, digital thermostats and control panels. In addition, the district has determined set points for heating and cooling, allowing for consistency among its buildings.

An additional energy project was the replacement of the gymnasium doors. We switched out the old, corroded ones for tight-fitting, energy saving ones. When the new doors were put into place, the change was highlighted at our morning meeting. In fact, students gave "three cheers for the new doors!" Students learned first hand from the changes that were taking place all around them.

Phase two of the renovations have been approved by the Columbus School Board and will occur next year which will include:

- interior lighting upgrade to more efficient high performance T8 fixtures
- motion detectors for lighting
- changing exterior lighting to LED fixtures
- replacement of the roof to improve R-value and reduce water and air infiltration
- Install new seals on thresholds of each door and seal windows
- Upgrade bathrooms to meet ADA requirements and replace fixtures with more water efficient models

All materials used will meet green building standards.

The school has two photovoltaic panels. One powers the parking lot light and the other powers a water feature located within the school. They also utilize daylighting whenever possible. The school purchases renewable energy from their utility, 13% of total.

The following energy saving devices have been installed:

- ✓ Switched to energy efficient lighting. Comments: A comprehensive overhaul has been planned and approved by the school board to begin in the summer of 2015.
- ✓ Installed occupancy sensors. Comments: Some classrooms have sensors. All appropriate spaces will have them in place during 2015.
- ✓ Installed vending misers. Comments: Removed vending machine (fall 2013)
- ✓ Upgraded to a more energy efficient HVAC system. Comments: HVAC reconfiguration, motor removal and controls upgraded in spring 2014.

- ✓ Other: Optimized the building energy management system (CESA 10) to limit peak demand and maximize unoccupied energy use.

The school has implemented behavioral changes to reduce energy consumption in the following ways:

This fall (2014) our staff and students have been engaged in the Cool Choices game. The game has encouraged discussions about ways to reduce energy use at school and home. An example of an action spurred from the game was to designate parking spaces for those who carpool. After playing the "Waste-free Lunch Card" students engaged in a friendly competition among classmates to see how many students could bring waste-free lunches to school.

We utilize our daily "All-School Morning Meeting" to address ways that we can save energy use in our school. We discuss things like keeping the vestibule doors closed during cold weather, and turning off lights.

In early November CESA 10 Energy Manager, Melissa Rickert provided staff a short Energy Management 101 presentation. She discussed the new HVAC system and controls and how to use the system efficiently, along with some other energy saving behaviors that could be implemented through the year. This presentation acted as a spring-board for school-wide behavioral changes that could easily be implemented. As a direct result of the presentation, staff are closing blinds each night and keeping their classroom doors closed during the day.

Energy is taught in the curriculum in the following ways:

In the DCS program, energy education is taught in kindergarten and 3rd grade. It is integrated into the environmental curriculum. In the traditional program, energy is taught in grade three. It is a part of a research project. Students chose to a particular area to learn more about. The final project is shared with classmates.

School-wide activities engage all students in learning more about energy, as mentioned previously. Oftentimes the topics of ways that we can reduce energy use come from the students themselves. Students often point out areas where we could do better. This is then brought up during our morning meeting to raise awareness among all staff and students.

Professional development is offered to staff in regarding energy and/or energy education:

Melissa Rickert, Energy Manager and Sustainability Specialist from CESA 10 came to present Energy Management 101 to our entire staff. Her presentation spurred conversations among teachers and students as to how we can save energy at school.

Principal, Sue Sewell took the Wisconsin K-12 Energy Education Program (KEEP) class and utilizes some of the activities school-wide whenever possible.

Jim Schieble, CEM Schools Program Coordinator for WPPI Energy has worked with staff to create projects for students that relate to energy savings. Mr. Schieble has worked with staff to put up two PV units for school use. One was put in the parking lot, where a light was desperately needed. A second panel was put above the atrium area to power the water feature. Last year Mr. Schieble used WPPI funds to purchase windmill kits that students used to study and experiment with wind energy. They were used by 2nd and 3rd grade students at an after school "Energy Club." The completed windmills were demonstrated by students to peers at Columbus Elementary and at the Columbus Area Energy Fair. Students not only demonstrated their windmills, but shared what they had learned about wind energy and the science behind creating their windmill.

This year Mr. Schieble has used WPPI funds to purchase energy sensors that students will use to determine the amount to energy used by refrigerators. He also purchased tools to help clean refrigerator coils, allowing students to measure energy use before and after the coils were cleaned.

Additional progress the school has made towards energy education:

One of the goals at CEDCS is to use our school as a "learning laboratory" for energy education. The past year has been especially exciting, since students could watch as our building was being renovated to be

more energy efficient. We took advantage of the "disruption" to involve students in what was happening around them. (Of course students were naturally interested in the workers and their tools!) Capitalizing on this opportunity to teach about energy, while changes were taking place around staff and students, made it real and memorable.

Element 1B: Improved water quality, efficiency, and conservation

Focus Area: Water

The school's drinking water comes from a municipal source. The school uses the following practices to increase water efficiency and ensure quality:

- ✓ Our school uses alternative water sources other than potable municipal or well water (ie. grey water, rainwater) for irrigation. Run-off from the greenhouse roof goes into a rain barrel, used to water plantings.
- ✓ Our school has discontinued watering on the school grounds.
- ✓ Our school's landscaping is water-efficient and/or regionally appropriate. A rain garden allows water to be used by plantings, rather than into the sewer.
- ✓ Our school has reduced storm water runoff and/or reduced impermeable surfaces. Rubber chips on the playground allow water to soak into the ground, rather than running off. Future plans include to build rain garden near drainage grate near playground and reassess our snow removal strategies.
- ✓ Taps, faucets, and fountains at our school are cleaned at least twice annually to reduce contamination and screens and aerators are cleaned at least annually to remove particulate lead deposits.
- ✓ Our school has a program to control lead in drinking water (including voluntary testing and implementation of measures to reduce lead exposure). EMC is the agency that we partner with to test water regularly.
- ✓ Our school ensures proper disposal of medication by advertising when there is a disposal opportunity in our community.

Additional progress the school has made towards improving water quality, efficiency, and conservation:

Efficiency: -We have sensors in our hand washing station. -Toilets are on sensors. -Lunch trays and silverware are washed at a central location - allowing full loads (less water usage.) -Faucets are maintained regularly to minimize leaks. -Water Fountains are readily available to staff and students. They have auto shut-offs. -Water bottles are regularly available to students in several classrooms.

A water fountain with a water bottle filling station was added that also displays and estimates the number of plastic bottles saved by refilling a reusable bottle. The unit was purchase by the school's Green Team using the money generated through a water-bottle fund raiser and the recycling of aluminum cans.

Students and staff identified and implemented water conservation and increased water quality in the following ways:

The DCS program has a rain garden that collects water run off and is used for educational purposes. DCS students also use rain barrels to collect water for the plants in the green house and gardens.

The school water bottle-filling station has encouraged students to drink more water, while limiting the use of water fountains.

The school has integrated education about water across multiple grade levels:

DCS Program:

K - water cycle, weather, exploring the world around us

1 - water resources/ needs of wildlife

2 - watersheds and mapping, wetland ecosystems, humans and ecosystems

3 - weather/climate, human impact on the environment

CES Program:

K-exploring the world around us.

2-wetland ecosystems

3-weather/climate. Habitats - the interrelationship of plants and animals

As a part of the ELA program, students complete research projects related to wetlands in Grade two, and about habitats in grade three.

Professional development is offered to staff regarding water education:

DCS staff received professional development training at the Wisconsin Green Schools Network “No Teacher Left Inside” summer institute and through the FIELD Corps training.

A DCS teacher attended a ProjectWET training, and was involved in water studies in local ponds and rivers.

Principal Sewell was an active Water Action Volunteer, monitoring the Rock River Watershed.

Additional progress your school has made towards water education:

In DCS the importance of water resources is infused in the environmental focus of the integrated curriculum in all grade levels. Fostering a respect for our worlds natural resources is an interwoven theme throughout the year.

In CES, the importance of water resources is also infused into units of study. At grade two, students study wetlands, and in grade three students study the water cycle and climate.

During All-School Morning Meeting, ways to save water in our school are discussed. The Cool Choices game highlighted actions that students could take to save water. Participation in the Cool Choices game spurred discussions about how students could make changes in terms of their own behavior that would reduce their water use.

Element 1B: Improved water quality, efficiency, and conservation

Focus Area: School Site

The school uses the following types of outdoor grounds on or near the school site:

- ✓ Our school has a habitat garden. Approximate size: 3 Comments: 3 gardens: Butterfly Garden (30X6 ft.) Rain Garden (25X8 ft.) Japanese: (30X30 ft.)
- ✓ Our school has a food garden. Approximate size: 6 4x4 raised beds and 2 round ones Comments: In addition to a food garden on the school grounds the charter school also has a plot at a community garden in which students grow food and donate to local people in need
- ✓ Our school has an arboretum. Approximate size: 60x20 Comments: Natural logs and rocks provide places to sit and climb.
- ✓ Our school utilizes a community park. Approximate size: 3 local parks Comments: A county park is used twice each month. The Crawfish River runs next to it, allowing for water studies.
- ✓ Our school uses the existing site, lawns, parking areas, playgrounds, etc. for outdoor teaching. Comments: We have an outdoor classroom area for students to gather and talk about what they are noticing.
- ✓ Our school has integrated natural features into the playground area. Comments: A tree was removed to make room for the new parking lot. The log was used on the playground. Rocks are natural play structures on the playground
- ✓ Other: 25 Acres - Our school uses a woods located at the edge of town where students study plants and animals several times each month.

Additional progress the school has made to maintain or improve safe, healthy, and environmentally sound grounds: The school grounds have several garden and green spaces for student use including: rain garden, Japanese Garden, raised vegetable beds, arboretum area and areas of green space to play with trees, boulders and logs. More than 70 percent of the outdoor space for student use is not blacktop.

There is an area of benches where students can come together to study science topics or observe the surroundings. The bench areas are located next to the raised bed gardens. This is a popular spot for students to stop to rest after working in the gardens.

The playground area has a layer of recycled tire chips that provide protection in the case of a fall from the equipment. The chips also minimize the build up of water and ice, which can be a safety issue. The rock box is enclosed by boards made of recycled plastic.

Trees have recently been planted near the playground area to provide shade in the future.

A solar panel has been placed near the playground area to provide light throughout the evening hours. This provides security to discourage vandals.

The school encourages educational use of the school grounds, school forests, and outdoor teaching sites in the following ways:

The teachers have developed multiple outdoor learning areas on the school campus to engage students in inquiry learning. The school has a green house that is used to start seeds that are then transplanted into the community garden and to be sold to the public. There are a variety of gardens that students use including: butterfly garden, rain garden, raised vegetable beds, Japanese garden, Art garden. There are a variety of natural play areas that include boulders, logs and grassy areas.

DCS students use the outdoor areas for investigations on a regular basis. At least once per week students are outdoors emerged in place-based education that integrates all curricular areas.

CES students use the outdoors to explore and learn.

Professional development offered to staff regarding use of school grounds school forest, and/or outdoor teaching sites in the following ways:

DCS staff has worked with Wisconsin Green Schools FIELD Corps staff development training. Through this program staff work with experts to development meaningful, in-depth learning experiences that incorporate restoration, research, and community service. One staff member attended the Leopold Education Project and has incorporated several of the activities into their teaching.

Additional progress the school has made to encourage educational use of the school grounds, school forests, and outdoor teaching sites:

As part of the DCS review of curriculum and goals, it continues to look for additional opportunities to increase the time students use the natural environment as their context for learning and to build partnerships within the community. This reflection on the effectiveness of their school-wide goals for meaningful environmental education and community involvement has resulted in a renewed effort to increase students active involvement in habitat restoration, community service, and community gardens.

A Japanese-style garden was created in a green space adjacent to our school. A parent helped create a plan to change this space into a beautiful garden with trees, shrubs, a rock-river bed, a birdbath and bench. The area is used by community members who often sit and enjoy the space.

A horticulture class was offered as a part of our summer school programs in which students created a flower garden, complete with a bench. Students in an engineering class then created garden art out of PVC pipe to add character to the garden. A bird bath and bird feeders out of PVC pipe were also added. This provides an area for visitors to sit.

Element 1C: Reduced waste production

Focus Area: Recycling & Waste Management

The school's Green Team, made up of staff and students at CEDCS, head up the recycling efforts and conducted a formal waste audit in 2011. Brenda Maier, the Food Service Director, conducted an informal waste audit in March 2009. We measured the amount of compostable food generated each day in the lunchroom. We also measured the amount of milk cartons and other non food items were generated.

The school recycles places recycling bins next to trash cans in all locations and recycles the following materials:

- | | | |
|------------|------------------|---------------------|
| ✓ Paper | ✓ Ink Cartridges | ✓ Other: waste |
| ✓ Glass | ✓ Cell Phones | fluorescent lamps & |
| ✓ Metals | ✓ Batteries | ballasts |
| ✓ Plastics | | |

There is no local market available for milk cartons at this time. An attractive area has been established for the main recycling center in our school. Students created a replica of the recycling symbol out of bottle caps to place in the recycling area.

The school composts waste in the following ways:

- ✓ Our school has a small scale, compost demonstration site used primarily for educational opportunities. Comments: Areas are set up in two classrooms
- ✓ Our school composts school landscape waste material. Comments: Waste is taken to the city recycling area, where it is composted.

A new waste management company has recently received the contract for Columbus and is willing to help us track our garbage and recyclables. We recently had to add an additional pick-up day for our recyclables. It was filled before the scheduled day. We announced this during All-School Morning Meeting and the students cheered!

The school takes the following actions to minimize and safely manage hazardous waste:

- ✓ Our school has a hazardous waste policy for storage, management, and disposal that is actively enforced. (Last Date Completed: Fall, 2013 Comments: A pick up of hazardous waste is planned for early 2014.
- ✓ Our school disposes of unwanted computer and electronic products through an approved recycling facility or E-cycle Wisconsin program. Last Date: May, 2014 Comments: completed annually
- ✓ All our computer purchases are Electronic Product Environmental Assessment Tool (EPEAT) certified products.
- ✓ Our custodial program has been certified to the Green Seal Standard for Commercial and Institutional Cleaning Services (GS-42), the ISSA Cleaning Industry Management Standard - Green Building or an equivalent standard. Comments: Use of green products has been a goal of the district for over 10 years.

We generate very little hazardous waste in our school. All chemicals require proper MSDS sheets to be kept on file. When we have hazardous waste to dispose, we hire a credible company to come in to handle and dispose of hazardous waste.

We keep MSDS sheets on file for all chemicals. We did a "clean sweep" of our district in the spring of 2013 with the intention of removing all hazardous waste. Custodians have been trained in the proper handling and disposal of chemicals.

Additional progress the school made to reduce waste, increase recycling/composting, or eliminate hazardous waste:

The "Green Team" began as a DCS group, but has expanded to CES and the middle school. The Green Team meets bi-monthly to create plans to promote recycling and continually challenge our school to reduce the amount of waste generated. We are actively involved in up-cycling juice pouches, Lunchables and GoGo Squeeze containers. Recyclable bins are placed near the trash areas in the lunchroom. Students who bring items from home that are recyclable, place their items in the proper container.

A collection cage was purchased and placed in the CEDCS/middle school shared parking lot area for aluminum cans. Use of the collection cage has been incredible. People throughout the community use it.

America's Recycles Day – Celebrated each year with special activities. K-1 students made a "quilt" out of juice pouches and GoGo Squeeze containers that they had collected for two weeks. The purpose of this activity was to demonstrate the large number of these containers that are generated in a short period of time. The quilt hangs on the school wall as a reminder of the importance of recycling.

Several years ago a group of elementary parents formed a committee for the purpose of reducing the amount of waste created by the student lunch program. The committee worked with the District Food Services Director to make changes in summer school lunch program. During Summer School, students recycled and composted parts of their lunches each day. Waste was reduced by about 40%. The compost was given to a local community member involved in vermiculture. The following year this was expanded to include the regular lunch program.

The CEDCS community has been playing "Cool Choices" to encourage environmentally friendly behaviors including recycling.

Waste reduction and recycling are part of the curriculum in some/all grades:

All four grades in DCS program incorporate waste reduction and recycling through out the year as part of the environmentally focused curriculum.

CES students are involved in daily recycling at school. Students take the initiative to ensure that items are properly put into the recycling containers. The use of recycling containers has increased over the past couple years. Students have become the “enforcers.”

A special assembly is held each spring in honor of Earth Day. Songs and special activities related to recycling are a part of this annual assembly.

Professional development for staff regarding waste reduction and recycling is offered in the following ways: Sue Sewell, Principal and Peggy First attended a Green and Healthy School workshop where they learned about more opportunities for recycling. Sue Sewell attended several sessions at the National Green Schools Conference on how to increase recycling efforts in schools.

Element 1C: Use of alternative transportation

Focus Area: Transportation

The school offers the following transportation options:

- ✓ Designated carpool parking stalls.
- ✓ Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.
- ✓ Programs to encourage carpooling: Designated parking spaces are located closest to school.
- ✓ A plan to regularly review bus routing.
- ✓ A policy pertaining to fuel-efficient fleet vehicle purchasing.
- ✓ Bike racks.
- ✓ Safe Pedestrian Routes to school or Safe Routes to School. Describe: Columbus Schools and the City of Columbus received a Safe Routes to School grant. It was used to study safe pedestrian routes.

We did a transportation survey of students and parents in the spring of 2013 which survey showed that about 31% of students were dropped on by car. We used this data to push for additional bus routes that would allow students who live within the city (but far from school) to ride the bus. This has increased bus riders (currently 33%) and reduced the car drop-offs (currently 15%). An additional 13% of students walk and 6% bike to school.

Progress the school has made towards transportation efficiency and decreasing emissions:

The addition of more bus routes has had a big impact on the amount of cars dropping off and picking up students each day. These routes were added to areas in the city that were considered too far for young children to walk and/or bike. The number of students riding the bus has decreased the car traffic around our school. Planning goes on to ensure that bus routes are efficient.

In the summer of 2014 the local bus company purchased eight new buses for their fleet. The buses purchased were chosen because they were more efficient, both in terms of gas mileage and emissions.

We received a Safe Routes to School Grant several years ago. The focus of the work that occurred as a result of the grant was to get more students to walk and/or bike to school. Routes were studied to ensure that they were safe for students. This is obviously the best way to save resources and decrease emissions. We hold an annual Walk or Bike to School Day each May. This has been a very successful event. Administration, School board members and local celebrities walk or bike to school with students (from designated areas in the community.) Last year students then enjoyed a presentation from BMX Champion, Matt Wilhelm, who included an anti-bullying message in his show. Students also participated in a bike rodeo which was run by the local police department. The purpose of this event was to encourage students to bike and walk to school on a regular basis.

Transportation issues and outdoor air quality are part of the curriculum in some/all grades:

Our Safe Routes to School grant was used to increase student awareness of what they can do to reduce their reliance on automobiles. A survey was given to students, and the results shared, which led to discussions about this issue, including talking about ways to save energy by walking or biking to school.

Pillar II: Improved Health & Wellness

Element 2A: Integrated school environmental health program

Focus Area: Environmental Health

The school has fully complied with the state law prohibiting elemental mercury and has an indoor environmental quality plan.

The school employs the following practices to improve contaminant control and ventilation:

- ✓ Our school has a comprehensive indoor air quality management program that is consistent with EPA's Indoor Air Quality (IAQ) Tools for Schools. Comments: We rely on a company that specializes in ensuring that indoor air quality is consistent with EPA's Indoor Air Quality requirements.
- ✓ Our school has taken actions to prevent exposure to asthma triggers such as mold, dust, and pet dander. Comments: New HVAC system includes humidity control to reduce the risk of mold
- ✓ Our school has installed one or more energy recovery ventilation systems to bring in fresh air for use in the HVAC system.
- ✓ Our staff visually inspects all our school's structures on a monthly basis to ensure they are free of mold, moisture, and water leakage.
- ✓ Our school's indoor relative humidity is maintained below 60%.
- ✓ Our school has moisture resistant materials/protective systems installed (ie. flooring, tub/shower, backing, and piping).
- ✓ There are no wood structures on school grounds that contain chromate copper arsenate.
- ✓ Our school prohibits smoking on campus and in public school buses
- ✓ All of the ground contact classrooms at our school have been tested for radon within the last 24 months.
- ✓ Radon tests for our school tested at or below 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

The school has a chemical management program that includes:

- ✓ Chemical purchasing policy (low or no-VOC products).
- ✓ Storage and labeling.
- ✓ Training and handling.
- ✓ Hazard communication.
- ✓ Spills (clean up and disposal).

The school controls and manages chemicals routinely used in the school to minimize student and staff exposure: We use very few chemicals in our school. We purchase green products district-wide to use to clean our school.

The school uses the following practices to reduce exposure to pesticides:

We have adopted an IPM policy. Keeping the school clean discourages the need to pesticides. Food consumption is limited to areas that can be regularly vacuumed and washed. The building is treated monthly, aligning with IPM requirements.

- ✓ Our school contracts with a certified and licensed pesticide applicator.
- ✓ Our school post a notice at the time of pesticide application and for at least 72 hours following application
- ✓ Pest control policies, methods of application, and posting requirements provided to parents and school employees.
- ✓ Copies of pesticide labels, copies of notices, material safety data sheets (MSDS) and annual summaries of pesticide applications all available and in an accessible location.
- ✓ Students are prohibited from entering a treated area for at least 8 hours after the treatment or longer if required by the pesticide label.

We do not use pesticides in any of our school gardens or on our school lawns. We take precautions to dry up spills quickly to discourage the formation of mold.

Professional development or training offered to staff regarding environmental health:

Our custodians have annual training which includes the latest information regarding environmental health standards and procedures.

Chemical safety and awareness and mercury information are part of the curriculum in some/all grades:

Very basic chemical safety is taught at the elementary level. This includes recognizing the symbols for poisons and the dangers associated with them.
Goggles are used whenever students are using chemicals that could cause damage to eyes.

Element 2B: Nutrition & Fitness

Focus Area: Health & Wellness

The school follows the district wellness policy:

The Columbus School District recognizes its responsibility to provide a healthy learning environment by supporting wellness, good nutrition and regular physical activity. This policy promotes life-long wellness behaviors, and links healthy nutrition and exercise to students' overall physical well-being. Healthy eating behaviors and regular physical activity are essential for students to achieve their full academic and life potential.

The District also supports employee life-long wellness behaviors, linking healthy nutrition and exercise to overall health, job performance and a positive work environment. Specifically, the District shall strive to accomplish the following physical activity, nutrition education, nutrition goals, and wellness goals:

1. Physical Education - The physical education curriculum shall teach students the importance of physical fitness and expose students to a wide variety of physical activities so students develop the concepts and skills necessary to be active for life.
2. Recess and Other Physical Activities - All elementary schools shall schedule daily recess for students and encourage students in active play
3. Health and Nutrition Education - The health education curriculum shall teach students the concepts, attitudes, skills and behavior for life-long healthy eating habits and physical activity.

The school provides the following options to promote nutrition and fitness:

- ✓ Our school has a salad bar during lunch. Comments: A salad bar was made possible through a grant that encouraged offering fresh fruits and vegetables to students.
- ✓ Our school offers fresh fruits and vegetables. Comments: These are locally grown, whenever possible.
- ✓ Our school uses whole grain foods. Comments:
- ✓ Our school has restricted access to foods of minimal nutrition value. Comments: Students are encouraged to bring healthy snacks. A list of appropriate snacks is sent home for parents to refer to.
- ✓ Our school has restricted access to beverages of minimal nutrition value. Comments: We removed our vending machine several years ago.
- ✓ Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. Comments: Vegetables grown in the school gardens are used in the salad bar, and are given to our on-site Summer Daycare Program. Students prepare soup each fall using harvested vegetables. A cooking class is a summer school offering.
- ✓ An indoor exercise room is available to students and staff next door at our middle school.
- ✓ Other: A fall harvest soup luncheon is held for families each fall. Soups and breads are prepared using garden produce.

The school has a policy for harassment and bullying:

The Columbus School District strives to provide a safe, secure and respectful learning environment for all students in school buildings, on school grounds, in school buses and at school-sponsored activities. Bullying has a harmful social, physical, psychological and academic impact on victims and bystanders as well as the person who is bullying. The school district consistently and vigorously addresses bullying so that there is no disruption to the learning environment and learning process.

Each building will have in place a universal program of bullying prevention. At a minimum, this will include curriculum and/or school-wide programs designed to improve school climate. The designated curriculum and/or program will be one that is listed on the National Registry of Evidence Based Programs and Practices. (www.nrepp.samhsa.gov)

The policy will be distributed annually to all students enrolled in the school district, their parents and/or guardians and employees. It will also be distributed to organizations in the community having cooperative agreements with the schools. The school district will also provide a copy of the policy to any person who requests it.

Additional progress the school has made towards improved health and wellness specifically related to the school facilities and policies:

Our school has established the following policies:

School Nutrition Programs - The School Nutrition Department shall promote healthy meals and healthy meal alternatives as part of the educational learning environment to promote a healthy lifestyle and reduce the incidence of childhood obesity. Food safety will be a major part of the school nutrition program.

Nutrition and Wellness Promotion in the School Environment- The entire school environment shall reflect the District's commitment to student and staff wellness. Celebration foods that are less nutritious should be limited to occasionally (suggested no more than twice a month) and not served prior to lunch.

Employee Wellness - Health and wellness shall be promoted to and promoted by district employees. The district shall provide wellness programs, educational opportunities and a healthy work environment to encourage employee health and well-being.

A Wellness Committee has been formed. It is advisory to the appropriate committee as designated by the School Board and shall meet at least quarterly to review policy implementation, progress made on attainment of goals, nutrition and physical activity policies.

The school provides the following resources for staff and student social well-being:

Our school offers students services by a school nurse, school psychologist and adult mentors. The school nurse meets with students to discuss health concerns, as well as provide classroom instruction relative to healthy habits.

We have an established adult mentoring program at our school. This program allows students to meet with a mentor at least once each week. The time is spent doing something that the child enjoys. School staff and community members act as mentors.

Our school uses Responsive Classroom as our model to help students learn appropriate social skills.

Responsive Classroom is based on the following basic beliefs:

- It is important to know children individually, culturally and developmentally
- Academic learning happens best within a positive social context (so that much attention is paid to help children develop positive social skills)
- Positive community membership is valued and we strive to balance the needs of the individual with the needs of the community.
- The belief that all children want to learn and can learn.

All staff members follow the Responsive Classroom model. We believe that this consistency contributes to each students' well-being.

The school employs the following practices to promote nutrition, physical activity and overall school health:

- ✓ Our school has implemented Fuel Up to Play 60. Date Established: Fall, 2012
- ✓ Our school has implemented Got Dirt or Got Veggies program. Comments: Incorporates some of the activities.
- ✓ Our school participates in a Farm to School program or other program to use local, fresh food. Date established. Fall, 2014 Comments: This program is held at the adjacent school this year. It will be expanded to our school next school year.
- ✓ Health measures are integrated into assessments.
- ✓ Our school promotes hand washing for staff and students.
- ✓ At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). Date established. Spring 2013 Comments: This program is headed up by our school nurse.

The following types of outdoor education, exercise and nature-based recreation is available:

DCS students use the outdoors as a learning context, and are outdoors in all types of weather. All students

are outside twice each day during a recess. Physical Education classes utilize the outdoors often.

A outdoor track is used by students during physical education classes and during recess. In the spring we hold a month-long Walking Program that allows students to log their laps, with the goal of walking as many miles as possible. Although there are prizes for students who walk the furthest, it is emphasized that students challenge themselves to walk further than they did the previous year.

Each winter we hold a Winter Olympics, which includes many winter outdoor physical activities. The sled race was a popular event, with some students pulling the sled, while others rode. Special events like this are planned throughout the school year.

The following professional development, training, or programs are offered to staff regarding health and wellness: Our Physical Education instructor has attended the National PE Conference several years in a row. The sessions that she attended focused on personal fitness.

Health, nutrition, wellness, and physical activity are a part of the curriculum in all grades:

Our school staff recognizes how a student's health, nutrition, wellness and physical activity affect his/her success at school. We strive to ensure that each child has the opportunity to be physically active during the school day. This need is met during physical education classes and recess as well as inside the classroom. Teachers provide students breaks between periods of academic work. Some staff use "Go-Noodle" while others use Yoga. During our All School Morning Meeting, we engage students in Yoga as they wait for the school day to begin.

Curriculum that teaches students about good health and nutrition occurs at each grade level. At the kindergarten level, curriculum is focused on good habits, as well as providing students an opportunity to visit the local hospital. Since hospitals can be very frightening to young children, we believe that a visit will lessen fears. Curriculum in grades 1-3 focus on making healthy choices. The importance of hand washing is visited each year.

Several years ago our school received a Physical Education Program (PEP) grant. Part of that grant proposal included a complete overhaul of our physical education program in favor of one that emphasizes personal fitness. A climbing wall and several obstacle courses were purchased to help students improve their stamina and coordination.

One of the obstacle courses used in K-3 physical education classes focuses on the workings of the circulatory system. It is called the Heart Course. During this unit, students learn about the workings of the heart, and actually get to travel through the system of ladders and tubes in a manner similar to how blood circulates through veins and arteries.

The school engages staff, students, and the surrounding community to promote health enhancing behaviors and wellness:

Staff have been involved in a friendly competition to see how many steps they take within a month-long period. Staff were provided with pedometers, and were asked to share out their progress each week.

The annual walking program is a great example of how we promote health and wellness among our students. We also have invested in playground equipment that gives students the chance to build stamina, strength and coordination.

There are several community events that draw many staff members and students. Some of them include:

- The Firecracker Five run and walk (Part of the July 4th celebration)
- Events sponsored by Tri 4 Schools which are triathlons and Mud Runs. Many members of our community are involved in these events. This year we received funds from Tri 4 Schools that they collected through entry fees. The funds were designated to be used to encourage health, nutrition and wellness.
- The Betty Becker Run and Walk - This is sponsored by the Columbus Community Hospital

- The Columbus Youth Soccer Program uses our school yard for its practices and games. They have programs for students beginning in kindergarten.

Pillar III: Effective Environmental and Sustainability Education
Element 3A: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems

Focus Area: Environmental & Sustainability Education

The CEDCS has a scope and sequence that integrates environmental and/or sustainability education as part of the regular coursework at all grade levels. The DCS program has a detailed integrated curriculum in which the environment is used as the context for learning all year. Students spend all four years investigating sustainability and other environmental education topics. Using inquiry excites students to learn about topics that they are interested in, and by sharing out their topic with the rest of the class, students have the opportunity to learn about many environmental/sustainability issues.

Environmental and sustainability education concepts are integrated throughout the curriculum in all grades:

DCS environmental themes:

- Kindergarten - Understanding the world I live in, place-based learning, how to be a productive learner in a natural environment
- First Grade - year-long phenology focus with an emphasis on changing daylight hours, exploring how plants and animals respond to changing environmental factors
- Second Grade - Earth's systems - water and mapping, changing landscapes and Earth events; Habitats and biological evolution; properties of matter; plants, seed, and pollination
- Third Grade - Life cycles, animal behaviors, energy and motion, weather and climate, inheritance of traits and natural selection
- All science concepts are presented with the natural environment as the context for learning. Other curricular area (language arts, literature, math and social studies) are integrated as well.

The school integrates environmental and sustainability concepts into assessments:

Because environmental topics are the core of all units in the charter school, these topics are also part of the assessments. They are also topics in CES, integrated within their comprehensive units of study.

Third grade students engage in the state reading and math testing. Over the past few years this has been the WKCE test. Student success has been high. Although this isn't directly related to environmental and sustainability concepts, it does show that achievement in these areas is high. We believe that providing a healthy environment contributes to student success, and has a place within this application.

Both the CES and DCS programs were rated as Significantly Exceed Expectations (scoring (91.1 and 88 respectively) on our latest state report card.

At the four grade level, students take the WKCE test in science. The scores on this test reflect K-3 learning. Student scores were well above the state average. The percentage of students who scored proficient or advanced at grade four was 85.2%.

Students have access to environmentally and/or sustainability focused clubs:

Energy Club - This after school club focuses on learning about renewable energy sources. It is available to 2nd and 3rd grade students. Last year 20 students were part of the energy club. Last year Energy Club students learned about alternate energy sources. They created Windmills using KidWind kits, which were purchased by WPPI as a part of their education initiative. The windmills were demonstrated to fellow peers and were then taken to the Columbus Area Energy Fair, where students shared what they learned with those attending the fair.

Professional development offered to ensure environmental and sustainability education include:

- ✓ Aquatic WILD - Number of staff_1
- ✓ Attended the Midwest Renewable Energy Fair
- ✓ Trainings offered through your local CESA - Number of staff_2

- ✓ Earth Partnerships Program - Number of staff_1
- ✓ Flying WILD - Number of staff_1
- ✓ Global Environmental Teachings Course - Number of staff_1
- ✓ LEAF (WI K-12 Forestry Education Program) – Number of staff_2
- ✓ Leopold Education Project - Number of staff_1
- ✓ National/International Conference – Please list conference and number of staff attended. 1 Comments: Marine Educator's Conference (Hawaii and Maine)
- ✓ Project Learning Tree – Number of staff_1
- ✓ Project WET - Number of staff_1
- ✓ Project WILD - Number of staff_1
- ✓ WI Association for Environmental Education Event - Number of staff_4
- ✓ WI Center for Environmental Education Sustainability Course/Workshop Number of staff_4
- ✓ Other in-service, training, workshop, or course: _5: No Teacher Left Inside

Outdoor learning experiences offered to students at the school each year include:

The DCS students participate in outdoor learning experiences on a weekly basis. These field experiences are an integral part of the environmentally focused curriculum.

The CES students have access to the green spaces on the school campus to use during recess and some teachers utilize the green spaces for learning activities occasionally during the year.

The Japanese Garden, which is located adjacent to the school is used by groups of students on a regular basis. Students go there to sketch or to read. The peaceful feeling of the garden is very calming to young students.

The onsite greenhouse is used during the spring months when students begin seeds and care for them. The extra plants are sold to help pay for soil and seeds. Students learn about the workings of a greenhouse.

Additional ways the school integrates environmental and sustainability education:

Grades two and three have two research units each year as a part of the English Language Arts curriculum. At least one of these research units focuses on environmental or sustainability issues. They are inquiry-based units, which provide students a choice of what area to focus on, and how to present their position to classmates.

Element 3B: Use of the environment and sustainability to develop STEM content, knowledge, and thinking skills

Focus Area: Environmental & Sustainability Education

Four DCS teachers have been trained in Project Lead the Way which they will add a STEM focus to supplement what is taught in the environmentally focused units. In addition, all DCS grade levels have a focus on using the inquiry process engineering concepts in non-Project Lead The Way units. In the development of the DCS curriculum, staff insured units include the following core beliefs:

- ✓ Students have a connection and sense of responsibility to the community,
- ✓ Students understand relationships between people and nature,
- ✓ Students design inquiry activities,
- ✓ Students can apply the engineering process.

The district has created a three-year plan to have all staff K-5 trained and using PLTW modules. Year two of the plan involves the DCS staff training the CES staff, who will teach two modules next year (2015-16) and two more in 2016-17.

Element 3C: Development and application of civic knowledge and skills

Focus Area: Community Involvement

The school has community involvement most of the focus areas. Description of community partnerships/involvement:

CESA 10 partners with the school district to reduce its energy impact and create a healthy learning environment. CESA 10 has contracted with the district to plan/oversee projects that will reduce energy use.

Community Garden - Students have two plots in the community garden and then donate the food produced to the food pantry or Clubhouse, the day care located within the school. Community gardeners have students start their seeds and grow them in the school greenhouse. This is in exchange for two plots in the community garden, where students raise many varieties of vegetables, raspberries and strawberries. Extra plants are sold to help cover the cost of seeds and soil.

Columbus Community Hospital regularly supports the learning of CEDCS students. Each year kindergartners are invited to the hospital to view several areas of the hospital. Students learn about staying healthy and what a hospital visit might entail. This annual trip is a spring board for student learning about the importance of hand-washing, keeping germs to oneself, the importance of drinking water and eating healthy food, wearing seat belts and getting proper rest - to name of few of the topics.

Principal, Sue Sewell is a member of the Greater Columbus Energy Commission. The commission is an arm of the Columbus City Council, and has the task to find ways to help the greater Columbus community be more energy efficient. Some of the projects link directly with our schools in order to enhance students' knowledge of energy. A project that has been done in the past is to purchase a solar pump, powered by a solar panel that runs a water feature within the school.

DCS partners with an area businessman who allows us to use his woodland for study. In exchange for use of the space, students clean the woods and clear its paths. Students enhance the area by putting up bird and bat houses. A local orchard has formed a partnership with our DCS first grade class. Students went to the orchard to help with harvesting gourds and pumpkins. While there they learned about the workings of an orchard. Students picked apples that remained on a tree after the formal harvest was over, which they took back to make applesauce to share.

The Tree Project

During the 2012-13 school year, our school took on a year-long project focused on a dying tree that was located on school property. A Norway spruce tree growing near the school's parking lot inspired the entire school to engage in problem-based learning. The problem was to decide what to do about the sickly Norway Spruce tree growing near the school parking lot.

Throughout the fall, the focus of the daily all-school morning gathering revolved around the Norway spruce tree. The learning went through various learning steps. Initially, students needed to identify the type of tree, measure it, and determine if it would survive another season, or needed to be taken down. A daily game of "Treevia" challenged students to test their knowledge of trees. Students then had the opportunity to vote about whether to cut the tree down, or to leave it. The vote took place on Election Day 2012. The vote to cut it down won by a landslide.

Consequently, the tree was taken down in early December, as the entire school watched. Students enjoyed watching the limbs being cut, and covered their ears when they were tossed into the chipper. When the tree was finally felled, students cheered! The tree produced several solid logs. The next step would be to mill the log to produce boards.

Andrew Black, from Black & Sons Furniture Makers, a local business, offered to help the school complete the subsequent steps of the project – from milling to creating something for the school from the wood. He found a local sawyer, Mr. Paul Osterhaus who was happy to mill the logs for the school. He set up his portable sawmill on school grounds, allowing students to watch the process. The steps involved in milling were explained and demonstrated. Staff members even got a chance to use an old-fashioned two-person saw to cut through a log! The boards were kiln dried. Once dried, Mr. Black worked to create a beautiful book nook for the school library. The nook provides a very special space for students to enjoy books. (Mr. Black took measure to make sure that students in wheelchairs would be able to access the nook.)

An unexpected learning opportunity occurred in Mrs. Kastenson Schmidt's second grade DCS classroom. A

worm was discovered crawling out of one of the slices cut from the tree. Students sent a letter, along with a picture of the insect to an entomologist at UW-Madison. The scientist wrote back, letting the students know that the insect likely played a role in the tree's death. The previous summer's drought likely stressed the tree, allowing the insect to infest and destroy the tree.

This problem-based learning opportunity continued as students decided what to do with the green space where the tree once stood. It was decided that a Sugar Maple be planted in its space, since it is Wisconsin's state tree. During summer school, horticulture students planned and planted a garden in the green space. Engineering students created PBC pipe creations, including solar light holders, a birdbath and a structure to hold bird feeders. A bench completed the space.

This project brought our youngest students and community members together to create something beautiful out of a tree that would have just been cut down and forgotten.

Community involvement where students participate in civic/community engagement projects related to environmental and sustainability education:

Columbus Energy Fair participation:

An after school club has been formed, called the DCS Energy Club. Last year the club members created windmills using KidWind kits. They used inquiry to determine what types of blades to create for their windmill. Once created, they made posters explaining the use of wind energy. They presented their work at the Columbus Energy Fair. They demonstrated their windmills and answered questions of those in attendance.

Community Arbor Day celebration:

Arbor Day is an important day in Columbus Wisconsin. The community has many special events around Arbor Day. Students are invited to create posters that share the importance of tree planting. DCS students are invited to the tree planting event, where they sing songs and help with the actual planting.

Hanson Woods:

Students visit the area woodland several times each month to learn about the local environment.

A local woodland is visited by DCS students to learn more about the plants and animals that live there, and to study seasonal changes. They have enhanced the area by adding bird and bat houses. They have done biodiversity studies, as well. They have improved the area by clearing paths and picking up garbage. DCS third graders are focusing on the animals that live there. Using trail cameras, they have been able to compare the animals found from one year to the next. They use environmental information to develop hypothesis as to why one animal may be more prevalent from one year to the next.

Annual Walk or Bike to School Day: Held annually to encourage students to walk or bike to school. We partner with the Columbus Police Department on this project.

School Gardens: The creation of the school gardens was a joint project among staff, parents and community members. A parent created the plans for the gardens, a local landscaping company helped by allowing us to use their equipment, and a garden company provided their expertise as to suitable plantings, and gave us a good discount.

CEDCS staff contributes to the community-based projects of local organizations as representatives of the school:

Columbus-Fall River Food Pantry

Each year students collect canned goods to contribute to the local food pantry as a part of the 100th Day of School Celebration. We try to have at least 100 cans, but generally have many more brought in. In order to make a stronger connection for our students with the food pantry, we had students actually load up the canned goods, travel to the food pantry, and unload them. Students formed a "human conveyer belt" to move the goods from one place to another. Teachers then placed the items on the shelves once they were unloaded at the pantry. A YouTube video captured the event, and was shared with parents and community members on our school website.

WPPI/Greater Columbus Energy Commission

Principal, Sue Sewell is an active member of the Greater Columbus Energy Commission. The mission of the Greater Columbus Energy Commission is to position Columbus as a leader in promoting and fostering energy conservation and sustainability. Sewell has been on the commission for two years. Columbus Water & Light (CWL) in partnership with the City of Columbus successfully promoted a variety of programs to help its residences and businesses use electricity more efficiently. In addition to local incentives, the E3P effort included partnerships with Focus on Energy through promotional events and mailings and enhanced efficiency project incentives. Administration of the programs is directed by the 7-member Greater Columbus Energy Commission (GCEC) composed of representatives from the utility, city services and government, and community members. During 2014 the commission added a special loan program that would allow low-interests loans to community members who seek to take on projects that would decrease energy use. The GCEC meets monthly as a public governmental body subject to open meeting rules.

Describe any additional progress your school has made towards community involvement:

Our outreach through newspaper articles and visits to community groups have allowed us to become "known" for our interest in sustainability. This knowledge often results in a community connection.

Cross-cutting Questions

CEDCS is recognized as a "Sugar Maple" School through Green & Healthy Schools Wisconsin and is a nationally certified PLT *GreenSchool!* In addition, CEDCS is a member of:

- ✓ Wisconsin Green Schools Network FIELD Corps Program
- ✓ Wisconsin Association for Environmental Education organizational member
- ✓ Wisconsin Green Schools Network member

Awards received for facilities, health, environment, sustainability, or environmental education:

Promising Practices Award, 2011, 2013, 2014

These awards were for practices that build school community.

Youth Gardens Grant Award, 2008

School profile on EEinWisconsin.org: <http://eeinwisconsin.org/net/org/info.aspx?s=102531.0.0.2209>