



2012-2013 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 K-12. (Schools on the same campus with one principal, even a 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 and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.



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 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 K-12. (Schools on the same campus with one principal, even a 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 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.

GreenRibbonSchools



(Nominating Authority's Signature)

Date

2/8/13

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
Jefferson-Fox River Academy**

Jefferson Fox River Academy (JFRA) is located in an urban area serving K-8 grade students. JFRA has made significant progress toward achieving all three pillars of the U.S. Department of Education Green Ribbon Schools program due to the efforts of an active Green Team that engages all students and staff to create a learning space encompassing a wide variety of environmental and healthy practices.

Pillar I: Reduced Environmental Impact

JFRA received the EPA Energy Star certification for K-12 School Districts in 2010 with a score of 96. The school purchases about 10% of its renewable energy from WE Energies. To increase energy efficiency, the school installed T-8 bulbs and occupancy sensors. The HVAC system was upgraded by replacing a boiler.

The Green Teaching Building (GTB), which is owned by the City of Appleton, houses fifth and sixth grade JFRA classrooms. The students, families, and the community retrofitted the building with green features including green technologies for lighting, heating, and water conservation. The building recently installed solar panels, allowing students to calculate and monitor energy use.

A Green Team was created this past year. Working with the YMCA After Care program, the Green Team educates JFRA students about simple energy conservation measures such as turning off light switches, using natural light from windows and unplugging appliances during school breaks. Energy is incorporated into curriculum to teach children how much energy they are using at school and at home. This gives students the ownership to solve the problem.

JFRA has multiple composting bins, including vermicomposting bins, which are used during the winter. Students compost snack waste and some lunch waste. In addition, the school's yard waste is also composted. The composted material is used to enrich the soil for the community garden. Composting activities help students learn about the flow of energy and nutrients.

Pillar II: Improved Health & Wellness

JFRA promotes both environmental health and student and staff health. The school has a comprehensive indoor air quality management program and takes measures to prevent exposure to asthma triggers. The school has a pest management policy and is reducing pesticide use on the school grounds.

JFRA encourages students to eat foods that have high nutritional values. It offers fresh fruits and vegetables and whole grain food. Food and beverages with minimal nutritional value are restricted. An outdoor picnic area for lunch is under development; currently students sit on the

lawn, but picnic tables and benches are being built along with native plantings to enhance the site.

JFRA promotes the following physical activity programs to improve overall health: the Walk/Run Club, intramural sports, Fuel Up to Play 60, Movin' and Munchin', Walk to Win, Jump Rope for Heart, Get Fit Get Active Mini-Sessions, and Healthy Kids. JFRA also implements Positive Behavior Intervention Systems (PBIS) rewards such as basketball, dance, and open gym.

Pillar III: Effective Environmental and Sustainability Education

Environmental education permeates the curriculum at all grade levels. In addition, the school offers unique experiences that support STEM education and 21st Century Skills. Some classes at JFRA participate in weekly outdoor field experience in their local school neighborhood. Students recently identified a degraded wetland on the south side of their campus that was used as a city dump. The goal is to restore this area and provide year round access to this public park for recreation and wildlife observation. Some restoration efforts include the removal of non-native and invasive species and using down wood that is chipped and spread on the park's trails, and installing nest boxes. In addition, the students will be working with the City of Appleton to attain Bird City USA designation.

JFRA partnered with the Town of Menasha to conduct a shoreline restoration project for Schildt Pond. Students planted more than 3,000 native plants along the pond to improve its water quality. The site continues to be used as a citizen science project. Students monitor the stream in September, October, April, and May. They collect data, monitor water quality, and collect and classify invertebrates. Students also participate in fish seining, learning responsible fishing practices, observing wildlife, and study the pond's hydrology.

Many special events build a stronger school by encouraging active student learning, community involvement, and partnership development. Special events include Leopold Weekend Observance; Earth Day celebrations with Paper Discovery Center, Habitat ReStore, and Harmony Cafe; and Environmental Education Week observance.

Cross-Cutting Questions

JFRA is a Wisconsin Green & Healthy School and a member of the Wisconsin Green Schools Network, which encourages schools to implement a healthy environmental philosophy. JFRA offers tours to school districts, parents, and community members. It also participates in events such as the Outagamie County Environmental Speaking Contest, Outagamie County Land and Soil Conservation Poster Contest, Wisconsin Water Association Poster Contest, KEEP Bookmark Contest, KEEP's Bright Idea Fundraiser, and Conservation Lobby Day.

Jefferson-Fox River Academy is a public school located in an urban area with more than 40% of students economically disadvantaged. JFRA has demonstrated significant achievement in all pillars and elements of the Green Ribbon Schools program.

The summary of their 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 a KEEP audit in which students use portions of the KEEP curriculum to assess energy usage in their building.
- The school received the EPA ENERGY STAR certification for K-12 School Districts in 2010 and received a score of 96.
- In accordance with green building practices in order to increase energy efficiency within the school, in 2010, the school fully implemented the Facility Energy Assessment Matrix within EPA's Guidelines for Energy Management.
- The school has an energy and water efficient product purchasing and procurement policy.
- The school has been renovated within the past 10 years. Thirty percent of the building area (top floor and lighting fixtures) meets green building standards.
- The school uses photovoltaic (PV)/Solar power as a source for renewable energy, which is onsite. The "Green Teaching Building has PV which is sold back to the power company.
- The school uses daylighting as a passive energy source.
- The school purchases about 10% of its renewable energy from WE Energies.
- The school installed the following energy saving devices:
 - Uses T-8 bulbs for energy efficient lighting
 - Installed occupancy sensors
 - Upgraded to a more energy efficient HVAC system by replacing a boiler
 - Installed new ceiling tiles in the cafeteria
- A new boiler that is more efficient has been installed. Lunch trays are washed at a central location that is more economical and saves energy and water. Storm windows installed on Green Teaching Building.
- Students turn off lights when leaving rooms and use natural light from windows when available and keep doors closed during heating season. Appliances are unplugged when unused over school breaks. Energy is incorporated into curriculum to teach children how much energy they are using at school and at home. This gives students the ownership to solve the problem, such as turning computers off when finished and unplugging phantom energy sources.
- The school uses much of the Wisconsin K-12 Energy Education Program (KEEP) curriculum and does energy across all grade levels. Much of the curriculum is based

off assessments students do and how students can make a difference. A big focus is on alternative energy sources and also on other non-renewable sources. Students take trips to a nuclear energy plant, Midwest Renewable Energy Association, Hydro-electric plants, and biofuel facilities at farms and universities.

- The school offers professional development related to energy education: KEEP, No Teacher Left Inside Institute, A Forest for Every Classroom Program, LEAF (Wisconsin's K-12 Forestry Education Program), Project Learning Tree, The Great Lakes Education Program, Great Lakes In My World, Project WILD, Project WET

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

Focus Area: Water

- The school's drinking water comes from a municipal source.
- To ensure water efficiency and ensure quality, the school uses alternative water sources other than potable municipal or well water (i.e., grey water, rainwater) for irrigation. Rainwater is used for community gardens.
- To ensure water efficiency and ensure quality, the school's landscaping is water-efficient and/or regionally appropriate. A rain garden is located outside Green Teaching Building.
- To ensure water efficiency and ensure quality, the school has reduced storm water runoff and/or reduced impermeable surfaces. The school has a porous sidewalk, rain garden installations and has rain barrels.
- Water reduction fixtures have been placed on all faucets in classrooms. Low flow toilets have been installed in Green Teaching Building.
- The staff and students work hand in hand to promote water conservation through education. The students planned, developed, planted, and continue to maintain a rain garden. They created a storm water video for the City of Appleton to educate the public on storm water issues. They have also mapped storm water and literally watched where rain goes in a storm event, eventually determining that the water flows to the Fox River untreated. A porous sidewalk has been put in at the Green Teaching Building. There are water reducers on each faucet in the building, as well as low flow toilets in the Green Teaching Building. Sensors have also been installed on urinals so they do not continually flush.
- Water topics are taught in the curriculum (i.e., water conservation, water cycle, local watershed and/or school water supply and discharge) in the following ways:
 - Kindergarten: trees, wood, animals, natural resources
 - First grade: rocks and soil, plants, natural resources, water cycle, forestry, human body systems, mammals, sustainable living, wetlands, weather
 - Second grade: weather, insects, space, health and safety, water cycle, forestry, human body systems, plants, Earth resources, mammals, sustainable living, wetlands, weather

- Third grade: earth materials, structures of life with references to life cycles and food chains, simple machines, water cycle, forestry, human body systems, mammals, sustainable living, wetlands, weather
- Fourth grade: magnetism, water cycle, electricity, weather, water cycle, forestry, human body systems, mammals, sustainable living, wetlands, Water usage – 4th grade created posters to promote water conservation
- Fifth grade: food and nutrition, earth's structure, natural resources, some references to water, recycling, energy, water cycle, forestry, human body systems, mammals, sustainable living, wetlands, weather
- Sixth grade: environments, water, weather, energy, water cycle, forestry, human body systems, mammals, sustainable living, wetlands, weather
- The school offers the following professional development related to water education:
 - Earth Partnership for Schools Watershed Institute, Great Lakes Education Program, Project WET
- Student projects are exhibited at community events including water projects at the state's environmental summit and conferences in and around Wisconsin and in Minneapolis, Minnesota.

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

Focus Area: School Site

- The school has a habitat garden (rain garden 30 x15ft) that was planned, created and planted by students.
- The school has a food garden (five 5 x 5ft planter boxes). One garden bed is handicap accessible.
- The school is currently working registering a school forest with the Department of Natural Resources.
- The school uses a wooded site adjacent to the school site (approximately five acres).
- The school has a restoration site in nearby Pierce Park, 36 acres.
- The school uses existing sites, lawns, parking areas, playgrounds, etc. for outdoor teaching that are approximately 3 - 4 acres in size and used for small group activities.
- An environmental code (FOX Code) was created by students to use as a guide for behavior when outdoors that addresses how we should act to be safe, respectful and responsible in the environment.
- Programs are offered to other area schools that highlight interaction with the outdoors. Classes and schools are invited to visit our restoration site in the ravine for an educational experience. We also have a check out system in place to loan equipment to fellow educators (snowshoes, compasses, measuring equipment, etc.)
- The school offers the following professional development opportunities to staff regarding use of school grounds, school forest, and/or outdoor teaching sites:

- No Teacher Left Inside Institute, A Forest For Every Classroom Program, LEAF, Project Learning Tree, Great Lakes Earth Partnership, Great Lakes In My World, Project WILD, Project WET

Element 1C: Reduced waste production

Focus Area: Recycling & Waste Management

- The school recycles the following materials:
 - Paper
 - Glass
 - Metals
 - Plastics
 - Ink Cartridges
 - Cell Phones
 - Milk cartons
 - Electronics
 - Comments: The Green and Healthy Schools committee has been meeting to form a milk carton recycling program. It took place during summer school. We would like to continue it throughout the school year. There have been two electronic recycling drives sponsored by our After School Program in the past year.
- The school's recycling bins are located in the following places:
 - Hallways
 - Classrooms
 - Lunch Room
 - Staff Lounge
 - Main Office
 - Parking Lot
 - Copy Room
- The school's recycling bins are clearly labeled and are placed next to trash cans in all locations.
 - A Student "Green Team" met and created signs to go on recycling bins that indicate mainstream recycling for all classrooms, hallways, and the lunchroom. The Green Team is currently producing a short video to teach other students what happens to trash and recycling.
- One hundred percent of the school's paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free.
- The school has a small scale, compost demonstration site used primarily for education opportunities
 - Vermicomposting in classrooms and bins by community gardens
- The school composts cafeteria food waste.
 - The school is working on sending waste to a biodigester at UW-Oshkosh.
 - The school composts school landscape waste material in the fall.

- In addition, the school has classroom compost storage containers.
- About 66% of the school's solid waste is diverted from landfills or incineration due to reduction, recycling and/or composting.
- In order to minimize and safely manage hazardous waste, the school disposes of unwanted computer and electronic products through an approved recycling facility or E-cycle Wisconsin program. The last collection took place during the fall of 2012.
- Additional progress to reduce waste, increase recycling/composting, or eliminate hazardous waste include:
 - Summer YMCA program-recycling milk cartons, co-mingled recycling containers in each room, collection of paper used on one side only near copier for reuse, composting of snacks, district study into lunch composting using UW-Oshkosh's biodigester
- The school's fifth grade and sixth grade students conducted a waste audit on Oct. 12, 2012 and they weighed daily lunch waste for week to compare to when waste will go to biodigester at UW-Oshkosh.
- The school encourages waste reduction, reuse and recycling behaviors by providing receptacles for recycling and composting and educating students firsthand about the 3 R's.
- Waste reduction and recycling are part of the curriculum in the following ways:
 - Outagamie County Recycling Coordinator Guest Speakers, student visits to the Outagamie Solid Waste Facility, weighing lunch garbage then composting it and comparing the difference in how much goes to the landfill.
 - First-hand examination of garbage: Sort out what can be recycled, composted and what goes to the landfill. Observe what happens to the amount of waste that ends up in the garbage can in classroom following this activity. It's amazing!
 - Reading Lessons: Dumpster Diver; Smash, Mash, Crash; I Stink; Trashy Town; I can Save The Earth; The Adventures of a Plastic Bottle; The Adventures of an Aluminum Can.
- Professional development offered to staff regarding waste and recycling education include WAEE Winter Workshop 2011 – Recycling in the Classroom.
- The school created a Green Team of students that is working on creating an informational video on waste and recycling for all the classrooms in JFRA to use in the classroom.

Element 1C: Use of alternative transportation

Focus Area: Transportation

- The school provides bike racks to encourage alternative transportation and bikes are available for local field studies.
- The school also encourages use of city buses, walking or biking to area parks for field experiences, families carpooling, biking, walking to school.

- The school awards prizes to students at each grade level who rode or walked to bike on Ride Your Bike or Walk to School Day.
- Transportation issues and outdoor air quality are part of the curriculum in the following ways:
 - 3rd – 6th Grade: Carbon Footprint Lessons
 - 5th – 6th Grade: Air Quality Alert Lessons
- The school offers the following incentives for students or staff to encourage sustainable transportation practices:
 - Walk and Bike to Work Days for Staff and Students
 - Bike to Work Day for Staff
 - City Bus Pass for Students
- Professional development offered to staff regarding sustainable transportation education include KEEP curriculum. Two staff piloted Transportation Curriculum at University of Wisconsin-Stevens Point in 2011.

Pillar II: Improved Health & Wellness

Element 2A: Integrated school environmental health program

Focus Area: Environmental Health

- The school has a comprehensive indoor air quality management program that is consistent with EPA's Indoor Air Quality (IAQ) Tools for Schools.
- The school has taken actions to prevent exposure to asthma triggers such as mold, dust, and pet dander.
- The school has an asthma management program that is consistent with the National Asthma Education and Prevention Program's (NAEPP) Asthma Friendly Schools guidelines.
- The school prohibits smoking on campus and in public school buses.
- The school has a pest management policy.
- The school is implementing a program through the IPM Manual.
- The school district uses pesticides and the school green team suggested to administration to not use pesticides on lawns outside of school building.
- The school created an outdoor lunch area for students, and provides outdoor physical education classes.
- The school's students and staff wear appropriate personal protection equipment when working with chemicals in classrooms. The school uses goggles in science classes, gloves for indoor and outdoor labs.
- Chemicals are properly disposed of following water testing labs (DO, pH).

Element 2B: Nutrition & Fitness

Focus Area: Health & Wellness

- In accordance to the district policy, the school supports wellness, good nutrition, and regular physical activity as part of the total learning environment. The policy addresses four areas.

- Provide a comprehensive learning environment for developing and practicing lifelong wellness behaviors.
 - School goals should be aligned to influence understanding, beliefs, and habits relating to good nutrition and physical activity. The school should not be dependent on revenue from high-fat, low nutrient foods to support school programs.
- Support and promote proper dietary habits contributing to students' health status and academic performance.
 - Food available at school should meet or exceed the District Nutrition Standards. Emphasis should be placed on foods that are nutrient dense to ensure high quality meals.
- Increase the amount of time students are engaged in physical activity.
 - Physical activity should include regular instructional physical education, co-curricular activities, and recess. Substituting any one of these components for another is not appropriate.
- Improve academic performance in high-risk groups so that no child is left behind.
 - Student health plays a critical role in academic stamina and performance. The school must ensure students' nourishment and activity needs are met. The diversity of the student population should be considered at all times to ensure that student needs are met.
- The school offers fresh fruits and vegetables
- The school uses whole grain foods
- The school has restricted access to foods and beverages of minimal nutrition value.
- The school has a garden that supplies food for students in the cafeteria, a cooking or garden class, and to the community.
- The school has a policy for harassment and bullying
 - The Appleton Area School District is committed to providing students with a safe, secure, and healthy school environment that allows all students to maximize their learning potential. The Board of Education considers bullying to be detrimental to the health and safety of students and disruptive to the educational process and is prohibited. Education, intervention, awareness, and prevention exists for staff and students to ensure a learning environment that is free of bullying or intimidation.
- The school social skills curriculum provides students guidelines for school wide expectations and social responsibility outside the classroom. Students are taught the Stop/Walk/Talk response to disrespectful behavior. Stop/Walk/Talk is a three step response students use to eliminate disrespectful behavior themselves and seek help from an adult if necessary. Students are also taught how to appropriately respond when they are a bystander or the aggressor. Staff members have participated in Bullying Prevention training. This training focuses on pre-correction of inappropriate behavior, rewarding the use of the three step response, and responding to reports of disrespectful behavior.

- The school has the following resources for staff and student social well-being including access to school nurse/health care provider, school psychologist, school social worker, and counseling services.
 - The school nurse, school psychologist, school social worker and counselor are on site several days each week. It is the goal of the district to provide the best care to our students in all areas including social well-being.
- The school uses the following practices to promote nutrition, physical activity and overall school health:
 - Implemented Fuel Up to Play 60
 - Participates in Movin' and Munchin'
 - Promotes hand washing for staff and students
- The school offers has many opportunities for nature-based and outdoor education: Field day, field trips to area nature centers, activities at neighboring parks, outdoor Physical Education, picnic lunches that teach social responsibility in the outdoors, on-site restoration work, nature journaling, compass work, GPS activities, snowshoeing, cross country skiing, outdoor survival skills, hiking, first-aid in the wilderness, canoeing, biking.
- The school offers the following professional development regarding health and wellness:
 - Students who are well nourished and physically fit are better able to focus in the classroom and achieve academically. In an effort to enhance school environments to promote and support healthy lifestyles, the Appleton Area School District sponsors the Education for Healthy Kids Summer Institute. The institute provides educators and parents with research-based knowledge about good nutrition and fitness. The knowledge gained at the institute is applied to ideas for school activities and decisions that promote healthy lifestyles within the school community.
- The school integrates health, nutrition, wellness, and physical activity in the curriculum in the following ways:
 - Walk/Run Club, Intramurals, Fuel Up and Play, Movin' and Munchin', Walk to Win, Jump Rope for Heart, Get Fit Get Active Mini-Sessions, Rewards for PBIS – 3 on 3 basketball – Dance – Open gym, Healthy Kids, and Wisconsin Partnership for Childhood Obesity.
 - Healthy snack, regular physical education, canoe trip, kayaking, swimming, tennis, dance, gymnastics, biking, archery, bowling, kayaking, skiing (downhill and cross-country).
- The school engages staff, students, and the surrounding community to promote health enhancing behaviors and wellness through:
 - Family activities-camping, sledding, hiking, rollerskating planned by parent booster organization
- Additional progress the school has made towards improved health and wellness among staff and students at the school includes:

- Staff participating in Wellness checks, Movin' and Munchin' programs.

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 school has a K-12 scope and sequence that integrates environmental and/or sustainability education as part of the regular coursework at all grade levels:
 - Food to Table curriculum, Recycling and Composting Unit, Alternative Energy Unit, Organics Unit
- The school has an environmental or sustainability literacy requirement
 - All our units incorporate literacy as part of the integrated curriculum that is in place and meets benchmark requirements as part of the Common Core Standards.
- The school has environmental and sustainability concepts that are integrated throughout the curriculum in grades Pre-Kindergarten through 6th grade
 - We have an integrated curriculum that is focused around the environment in math, reading, writing, public speaking, science and social studies.
- The school integrates environmental and sustainability concepts throughout the curriculum in the following subject areas:
 - Math
 - Science
 - Social Studies
 - English language arts
 - Foreign language: Spanish at JFRA and After Care Program
 - Art/Drama
 - Music
 - Physical education
 - Technology education and engineering
- The school integrates environmental and sustainability concepts in to the above subject areas in the following ways:
 - Environmental topics such as water, energy, wildlife, forestry, sustainable living practices, birds, are topics we study. Non-fiction reading and in some cases fiction text are integrated into the lessons, which provide students with vocabulary knowledge and reading skills. We use our natural resources and tie this into science and social studies lessons. Math is integrated as well throughout the curriculum when appropriate.
- The school integrates environmental and sustainability concepts into assessments through a formal assessment, informal assessments, and projects that make up how we assess our students.

- 75% of the school's students show high levels of proficiency in environmental and sustainability concepts, varying on whether it is a formal assessment or project being assessed.
- The school offers a Green Team club for students and 5 - 10 students attend each meeting.
- The school has teachers who received professional development related to environmental and sustainability education:
 - Aquatic WILD (1 staff member)
 - Attended the Midwest Renewable Energy Fair for professional development credit. Students also presented at the Energy Fair (1 staff member)
 - Trainings offered through local CESA that had a variety of workshops (4 staff members)
 - Great Lakes Earth Partnership for Schools Program (5 staff members)
 - Flying WILD (1 staff member)
 - KEEP (WI K-12 Energy Education Program) (3 staff members)
 - Optional comments: Energy Education in the Classroom, Double Renewables, Online Course Biomass
 - LEAF (WI K-12 Forestry Education Program) (4 staff members)
 - FECC, Greening Your Math Program: Mathematics in the Classroom, Forestry Education in the Wisconsin K-12 Classroom Workshop
 - Leopold Education Project (4 staff members)
 - Project Learning Tree (4 staff members)
 - Project WET (2 staff members)
 - Project WILD (4 staff members)
 - Related university level course (4 staff members)
 - Comments: WAEE Annual Conferences and Winter Workshops
 - Other in-service, training, workshop or course (4 staff members)
 - Great Lakes In My Backyard
 - One Bird Two Habitats
- The school offers the following outdoor learning experiences to students each year:
 - Outdoor Physical Education classes, Journaling, Heat Loss and Gain, Alternative Energy Sources, Tracking, Adaptations, Wildlife Identification, Bird Ecology, Forestry, Waters, Phenology, Sustainable Practices, Prairies
- The school works on connecting students to higher education sites such as high schools and local colleges to further investigate interests they may have in environmental and sustainability education.
- The school also has a weekly field biologist, a community garden, a snowshoe lending program, Earth Week lessons, a rain garden, and native landscaping in the picnic/outdoor learning area behind the school.

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

Focus Area: Environmental & Sustainability Education

- Students visit the Fox Valley Technical College “Fab Lab” to take proto-types they created in the classroom and actually use technology to create their product.
- Use of GPS Units and compass in the field

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

Focus Area: Community Involvement

- The school has community involvement in the following focus areas:
 - Energy
 - Water
 - School site
 - Recycling and waste management
 - Transportation
 - Environmental Health
 - Health and Wellness
 - Environmental and Sustainability Education
- Description of community partnerships/involvement:
 - Community Garden Partnership/Goodwill Industries
 - Valley New School - Project Based Learning
 - Wisconsin DNR - Local wildlife biologists
 - Green Charter Schools Network
 - Appleton Park and Rec Dept. - Pierce Park Projects and GTB
 - Wild Ones - Prairie plant source and planting advice
 - City of Appleton - Approval to move forward on Ravine Project
 - Wisconsin Wildlife Federation - Field Biologist
 - Bubolz Nature Center - Education Site
 - Mosquito Hill Nature Center - Education Site
 - Heckrodt Wetland Reserve - Education Site
 - Town of Menasha - Schildt Pond Restoration and water testing site
 - University of Wisconsin - Fox Valley - Education Site
 - Paper Discovery Center - Education Site
 - University of Wisconsin-Extension - Conservation Speaking and Poster Contest
 - Apple Creek Y - Education Site
 - Fox Valley Technical College - Fab Lab
 - Wisconsin Bluebird Association - Monitoring Bluebird Populations in Pierce Park
 - OMNNI Associates - Engineering advice
 - Fox Academy West Charter School - Geocaching Lesson

- Community involvement focus areas where students participate in civic/community engagement projects related to environmental and sustainability:
 - Energy
 - Water
 - School site
 - Recycling and waste management
 - Transportation
 - Environmental Health
 - Health and Wellness
 - Environmental and Sustainability Education
- Description of civic engagement:
 - Students at JFRA have recently identified a degraded and long-neglected wetland on the south side of our campus that was once used as a city dump. It is a small forested woodlot located in a ravine. Students interviewed local neighbors to find out about the site. They also found first-hand sources that provided journaling and articles about what happened 20 - 70 years ago in that area. The goal is to restore this area and provide four-season access to this public park for recreation and wildlife observation. Non-native and invasive species are being removed from the park. Down wood has been and is being chipped and spread for trails. Students are creating informational signs and educational materials to be distributed. Nest boxes, bird houses, and benches will be constructed from lumber taken from the property. In addition, the students will be working with the City of Appleton to attain Bird City USA designation.

The students, families, and the community have been involved in retrofitting the Green Teaching Building with green features. The building features green technologies for lighting, heating, and water conservation. The building recently had solar panels installed which allow students to calculate and monitor their energy use in the building.

The school has multiple types of composting bins available, including vermicomposting bins, which are used during the winter months. Students compost their snack waste and some of their lunch food waste. Even some of the school's yard waste is able to be composted. The composted material is then used to enrich the soil for the community garden. Composting activities help students learn about the flow of energy and nutrients.

A Green Team has been developed this past year. Working with the YMCA After Care program students take on the responsibility of educating JFRA students about what students can do to help the environment. Currently the team members are producing a video on solid waste disposal in the school.

They would like to have a monthly focus around each area presented in Green and Healthy Schools.

An outdoor picnic area for lunch is in the works. Currently students sit on the lawn, but picnic tables and benches are being built along with native plantings to enhance the site. Students will be on hand to prepare and plant this site.

In 2006 the JFRA partnered with the Town of Menasha to conduct a shoreline restoration project for Schildt Pond. Students planted over 3000 native plants along the pond in hopes to improve the water quality over time. The site continues to be used as a citizen science project. Students monitor the stream once per month in September, October, April, and May. They collect data, monitor water quality, collect and classify invertebrates. Students also participate in fish seining, and learn responsible fishing practices, viewing of wildlife, and the study of the inflow and outflow of the rivers hydrology into and out of this pond.

Students partnered with the Blue Bird Restoration Association of Wisconsin, the Northeastern Wisconsin Audubon Society, and Dr. Kent Hall to build, fund, and install nesting boxes in a variety of locations around the Appleton's park system in 2007. Students use this as a citizen science project and collect data on the cavity nesting birds that use these boxes each Spring and Summer. Data is submitted to the Blue Bird Restoration Association Annually.

JFRA has five gardens they have constructed for learning purposes. They include a prairie, butterfly, rain, tulip and a community garden. Classes use the prairie garden to study the life cycle of prairie plants, identify plants, learn about seed dispersal, and witness the biotic and abiotic relationships that impact the gardens. The butterfly garden allows for the observation of the interdependency of plants and butterflies. The rain garden helps students study different types of water and soil conservation practices. The community garden is a demonstration garden for the City of Appleton. All the gardens are also great locations for students to participate in nature journaling. The local Wild Ones chapter was able to give advice on choosing native plant species and helped cover the cost of some of the plantings with the Planting for Tomorrow Grant. The school also received the Appleton Education Association/Appleton Area School District Mini-grant for the rain garden installation. A more recent garden is the tulip garden that students are participating in along with other schools to determine when tulips they planted in fall will come up in spring and compare this to other schools in Wisconsin.

Fox West Academy in Hortonville created a geocaching course for JFRA students to practice GPS skills. This provided students from another school to

practice leadership skills and put into practice what they learned. Partnering with other charter schools has proven beneficial for both schools.

Many special events build a stronger school by encouraging active student learning, community involvement, and partnership development. Special events include: Leopold Weekend Observance; Earth Day celebrations with Paper Discovery Center, Habitat ReStore, and Harmony Cafe; EE Week observance; Outagamie County Environmental Speaking Contest; Outagamie County Land and Soil Conservation Poster Contest; Wisconsin Water Association Poster Contest, KEEP Bookmark Contest; KEEP's Bright Idea Fundraiser; and Conservation Lobby Day to name a few.

- Focus areas where school staff contribute to community-based projects of local organizations as representatives of the school:
 - Energy
 - Water
 - School site
 - Recycling and waste management
 - Transportation
 - Environmental Health
 - Health and Wellness
 - Environmental and Sustainability Education
- Description of the above community involvement:
 - Staff assists community organizations such as Paper Discovery and ReStore on Earth Day promotions by having booths set up and activities for visitors at the events. Booth at Farmer's Market Downtown Appleton, Booth at Alternative Energy Day at SCA Tissue. Presentations at NSTA Conference, WSRA Conferences, WAEE Conferences, Wisconsin Charter School Conferences, WISN Conferences, and No Teacher Left Inside Conferences.
- JFRA is fortunate to have at hand a vast array of governmental agencies, environmental centers, health and wellness venues, along with non-profit organizations (Land Trust, Riverview Gardens, Bubolz Nature Preserve) that continually support the work and efforts of staff and students at JFRA. These organizations provide educational opportunities for our staff and students, outdoor sites in some cases for our students to learn about specific topics, as well as guest speakers that come in and talk to our students from time to time.
- The school continues to expand and is currently looking at working with the City of Appleton to become a Bird City USA site.

Cross-cutting Questions

- The school received the following awards for facilities, health, environment, sustainability, or environmental education:

- Awards: Sandy Vander Velden, recipient of the President's Innovation Award for Environmental Education 2012, Mielke Elementary Educator of the Year 2007-2008, National Board for Professional Teaching Standards Certification 2003; Herb Kohl Educational Foundation Fellowship Award 2002; WSRA Pat Bricker Research Award 2004, 2001.
- State or national environmentally/sustainability related programs students are actively involved in:
 - Wisconsin Envirothon Competitor, 2012
 - Wisconsin Green Schools Network Field Program, 2011–2012, 2012–2013
 - Wisconsin Green Schools Network Youth Summit, 2012
- The school has staff that belong to the following organizations:
 - Wisconsin Association for Environmental Education
 - Wisconsin Green Schools Network
 - North American Association for Environmental Education
- The school is developing a story of their success which can be found at:
<http://eeinwisconsin.org/net/org/info.aspx?s=67300.0.0.2209>