



State of Rhode Island and Providence Plantations  
**DEPARTMENT OF EDUCATION**  
Shepard Building  
255 Westminster Street  
Providence, Rhode Island 02903-3400

Deborah A. Gist  
Commissioner

February 15, 2013

Andrea Suarez Falken  
Director  
U.S. Department of Education - Green Ribbon Schools  
400 Maryland Avenue SW  
Washington, D.C. 20202

Dear Ms. Falken:

The Rhode Island Department of Education (RIDE) is pleased to announce that it is nominating the Compass Public Charter School for a Green Ribbon Schools award. RIDE believes this school has a minimal impact on the environment, a positive impact on the health of students and staff, and allows students to increase their environmental awareness.

Our application and scoring rubric are modeled after the U.S. Department of Education's application and rubric. Our online paperless application was open to the public for several months. Applications were scored by a panel of five members representing RIDE, the Rhode Island Department of Health and the Rhode Island Environmental Education Association. We also worked closely with the Environmental Protection Agency and the Rhode Island Emergency Management agency to streamline our 2013 application.

The Compass Public Charter School is a K-8 school located in Kinston, Rhode Island. It is not classified as disadvantaged as less than 40% of students receive free or reduced lunch.

Rhode Island has been at the forefront of the green-school movement, as school construction projects in Rhode Island are required to comply with the Northeast Collaborative for High Performance Schools Protocol (NECHPS). This ensures that approved projects provide high quality learning environments, conserve natural resources, consume less energy, are easier to maintain, and provide an enhanced school facility.

RIDE looks forward to continue participating in the Green Ribbon Schools program and foster widespread and integrated green practices from our local school districts. Please feel free to contact me at 401-222-4294 or at Joseph.daSilva@ride.ri.gov if you have any questions or concerns.

Sincerely,

  
Joseph da Silva NCARB, REFP, LEED AP  
School Construction Coordinator  
Contact for the Rhode Island Green Ribbon Schools Award



## 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.

U.S. DEPARTMENT OF EDUCATION  
**GreenRibbonSchools**  


ED-GRS (2012-2013)

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U.S. Department of Education Green Ribbon Schools 2013

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For Public Schools only: [x] Charter [ ] Title I [ ] Magnet [ ] Choice

Name of Principal Mr. Allen Zipke \_\_\_\_\_  
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name The Compass School \_\_\_\_\_  
(As it should appear in the official records)

School  
Mailing Address 537 Old North Road

City Kingston State RI Zip 02881

County Washington State School Code Number\* 23601

Telephone (401) 788-8322 Fax (401) 788-8326

Web site/URL www.compassschool.org E-mail director@compassschool.org

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

Allan Zipke Date 2/13/13  
(Principal's Signature)

Name of Superintendent\* Mr. Allen Zipke \_\_\_\_\_  
(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

District Name\* The Compass School Tel. (401) 788-8322

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

Allan Zipke Date 2/13/13  
(Superintendent's Signature)

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

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**PART II – SUMMARY OF ACHIEVEMENTS**

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

### **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.

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## **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.

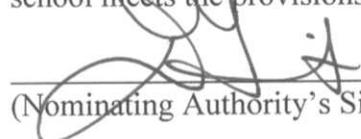
1. The school has some configuration that includes one or more of grades K-12. (Schools on the same campus with one principal, even a K-12 school, must apply as an entire school.)
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 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 \_\_\_\_\_ Rhode Island Department of Education

Name of Nominating Authority \_\_\_\_\_ Deborah A. Gist, Commissoner  
(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.

  
(Nominating Authority's Signature)

Date 2/15/13

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](mailto: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](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

The mission of The Compass School is to teach environmental sustainability and social responsibility. Students in grades K-8 are taught through a project based approach, researching various topics and presenting their learning to others at project shares, or conducting stewardship projects. The curriculum is created around environmental topics, and environmental sustainability is embedded into the everyday life of the school. Due in part to this integration, in 2012 Compass students scored in the top 2% of Rhode Island students in the area of science. Classroom studies involve such topics as a study of waste, energy sources, robotics, solar car construction, biomimicry, aquaponics and aquaculture.

The Compass campus comprises 20 acres of historic farmland, with 5 acres of wooded wetlands, a stream, vernal pools, and a variety of local plants and animals. The remaining area surrounding the school is fields with rock walls. Our property has native landscaping that requires no irrigation. Most walkways and entryways are constructed of permeable materials. The entire property is extensively used as an outdoor classroom and as an area to take walks and enjoy nature. Students are often outside engaged in a variety of activities, both on-campus and away on field trips. They do nature journaling and study vernal pools, tree growth, soils, stream habitats, and learn how farms produce food. Seventh and eighth grade students go on an annual camping trip to a location where they can study the local environment. Our physical education program meets outside all year and includes winter activities such as sledding.

The Compass School building is a model of sustainable design. The main building has extensive windows in every room providing natural light. An extensive array of solar panels on the roof provides a partial source of electricity for the building and a computer program allows students to monitor output. Updating computers, use of CFL light bulbs, adjustable thermostats in every room, attention to heat loss, and use of windows in warm weather has allowed us to reduce energy consumption by 30% over the past two years.

“Reduce, Reuse and Recycle” are important concepts at Compass. Documents are printed on both sides of the paper and scrap paper is used for math and art, and shredded for use as bedding in worm compost bins and the chicken coop. Students have reusable utensils to use at lunchtime and bring in their own reusable water bottles and food containers. All classrooms have recycling bins for paper, plastic and other recyclable materials, with the constant goal of reducing waste. Students constructed a bin for Compass families to use for recycling supermarket plastic bags, and another bin is used to collect and send certain recyclable materials to Terracycle. In art and music students make instruments and sculptures from natural and recycled materials.

All students at Compass are involved in an outstanding organic gardening program. A greenhouse was constructed by parents several years ago. Students make soil blocks in February and plant seeds and care for seedlings throughout the spring. Every May an EcoFair is held on a Saturday at Compass for people in surrounding communities. The day features student presentations on environmental projects and vendors sharing information on environmental issues. Many of the plants grown in the greenhouse are sold at EcoFair, and the remainder are planted in our school gardens. We’ve created raised beds and each class maintains an area. Plants that will not produce vegetables until August are taken care of over the summer by teachers and families. Water barrels gather rain water off the roof to be used for

watering. In June the lettuce is ready and the whole school holds a salad day. In the fall other crops are harvested and made into stew and salsa, and produce is also donated to a local food bank. The idea of promoting locally grown foods is also the focus of our annual fall fundraiser, "A Celebration of Local Foods." In cooperation with local businesses, fourteen local farms and restaurants provide an extensive array of appetizers made from local produce.

As part of our gardening program, we produce and maintain our own compost under the supervision of one of our teachers who has been trained as a Master Composter. After lunch every day, students bring food scraps to our small flock of chickens and compostable scraps to our compost bins. We supplement our compost with coffee grounds obtained from a local coffee shop and manure from the chicken coop. The compost bins are maintained by students and finished compost is sifted and applied to the gardens by students.

Over the years we have developed relationships with several organizations involved in the environment and sustainability, such as the Apeiron Institute for Sustainable Living, the Wood-Pawcatuck Watershed Association, and the Audubon Society of Rhode Island. Older students from Compass perform volunteer work after school and during the summer for Rhody Native, doing everything from planting, weeding, and invasive species removal. Our proximity to Narragansett Bay also enables us to work with Save the Bay on projects such salt marsh restoration and eelgrass restoration, and with ASRI on beach cleanups. In addition, the Compass School is a GLOBE (Global Learning and Observation to Benefit the Environment) School; as such students are participating in a worldwide phenology study. Students are also conducting a long-term tree growth study for the Smithsonian Institution. As a result of these activities, in conjunction with daily life at The Compass School, students recognize that they are part of a global community of caretakers of the earth.

# Green Ribbon Schools Rhode Island Application 2013

Response ID: 90 Data

## 4. Page Three

### School Contact Information

**School Name**

The Compass School

**Street Address**

537 Old North Road

**City**

Kingston

**State**

RI

**Zip**

02881

**School Website**

[www.compassschool.org](http://www.compassschool.org)

**Principal First Name**

Allen

**Principal Last Name**

Zipke

**Principal Email Address**

[director@compassschool.org](mailto:director@compassschool.org)

**Principal Phone Number**

401-788-8322 x23

**Lead Applicant First Name (if different from principal)****Lead Applicant Last Name (if different from principal)****Lead Applicant Email****Lead Applicant Phone Number****Level**

K - 8

**School Type**

Charter

**How would you describe your school?**

Rural

**Does your school have at least 40 percent of your students from a disadvantaged background?**

No

## 6. Page Five

**Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars?**

Yes

**Program(s) and level(s) achieved:**

Charter Schools are held to a high level of accountability. The charter has to be renewed every five years. Last spring a team of 3 representatives from RIDE spent 3 days at Compass. They visited classes, talked with parents, teachers, and council members, and examined our academic success. We received an exemplary report in all areas. The report was about 50 pages long but it stated "In sum, based on our review, the Compass School's consistently high academic performance in both reading and math proficiency demonstrates that the school's academic program is a success."

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

No

**Award(s) and year(s):**

## 8. Page Seven

**Can your school demonstrate a reduction in its Greenhouse Gas emissions?**

Yes

**Please provide the following information:**

Percentage reduction : 9%

Time period measured (mm/yyyy - mm/yyyy) : 1/1/2012-12/31/2012

Initial GHS emissions rate (MT eCO2/person) : 49.05 MT CO2E/yr

Final GHG emissions rate (MT eCO2/person) : 45.00 MT CO2e/yr

Offsets : 3.95 MT co2e/yr

How did you document this reduction? : calculation based on actual use

**Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification?**

No

**If your school received the certification, please note the year it was achieved and the score received:**

**Has your school reduced its total non-transportation energy use from an initial baseline?**

No

**Please provide the following information:**

**What percentage of your school's energy is obtained from:**

On-site renewable energy generation : 9% (31,380 KBTU/Year)

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program : 0

Type : Solar Photovoltaic

**In what year was your school constructed?**

2000

**What is the total building area of your school?**

7,660 sq. ft

**Has your school constructed a new building or renovated an existing building in the past ten years?**

No

**Please provide the following information:**

**Do any parts of your existing buildings meet green build standards (for example, LEED, CHPS, Green Globes, or other standards)?**

No

**Please provide the following information:**

## 9. Page Eight

**Can you demonstrate a reduction in your school's total water consumption (measured in gallons/occupant) from an initial baseline?**

Yes

**Please provide the following information:**

Average Baseline water use (gallons per occupant) : 817

Current water use (gallons per occupant) : 650

Percentage reduction in domestic water use : 20%

Percentage reduction in irrigation water use : na

Time period measured (mm/yyyy - mm/yyyy) : 01/2010-01/2013

How did you document this reduction (ie. ENERGY STAR Portfolio Manager, school district reports)? : Water department reports

**Please provide the following information about your school's landscaping**

What percentage of your total landscaping is considered water-efficient or regionally appropriate? : 100%

What types of plants are used and where are they located? : Outside of the vegetable gardens, all of the landscaping is native (meadow/woodland) and/or regionally appropriate, water-efficient grass and shrubbery (rhododendrons, witch hazel, etc.) that do not require watering during droughts to survive.

**Describe alternate water sources used for irrigation. (Maximum 50 words)**

The school uses several water barrels with run off coming from the roof.

**Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces. (Maximum 50 words)**

The school has minimized impermeable surfaces. The only areas with impermeable surfaces are the entry road and a few small sidewalks.

A sidewalk was added two years ago and a second entry road last year. Both were constructed with stone so water could penetrate.

The areas alongside the paved road are grassy buffer areas; there is a single catch basin for a curbed section that collects runoff and discharges it to a grassy swale in the back field. Rainwater from the roof is collected in rain barrels; overflow discharges to the ground nearby and percolates into the soil

.

**Our school's drinking water comes from:**

Municipal water source

**Please describe how the water source is protected from potential contaminants. (Maximum 50 words)**

**Describe the program you have in place to control lead in drinking water (Maximum 50 words)**

The water is tested.

**10. Page Nine****What percentage of solid waste is diverted from landfilling or incinerating due to recycling and/or composting (i.e. Recycling Rate)?**

- A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected). : 7.6  
B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected). : 9.4  
C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected). : 9.22  
Recycling Rate = ( (B + C) ÷ (A + B + C) x 100 ) : 71.6  
Monthly waste generated per person = (A/number of students and staff) : .04

**What percentage of your school's total office/classroom paper content by cost is post-consumer material or fiber from forests certified as responsibly managed and/or chlorine-free?**

100%. We purchase paper from WB Mason. The paper has a stamp from the Sustainable forestry initiative which says certified sourcing.

**Please provide the following information about your school's hazardous waste**

List the types of hazardous waste generated (Flammable liquids, corrosive liquids, toxics, mercury or other) : We do not use any hazardous waste.

**1. Describe other measures taken to reduce solid waste and eliminate hazardous waste. (100 word Maximum)**

Materials containing hazardous waste are not used. We have a portable classroom and connected it so the waste flows into our leech field, eliminating pumping. We have our own compost system for appropriate materials. When possible materials are reused. Paper copying is two sided to reduce paper waste. Digital communication is used to eliminate paper use.

**Which green cleaning standard is used?**

Vinegar and water cleaners by teachers.

**Does your school use "third party certified" green cleaning products?**

No

**Please provide the following information about the green cleaning products used in your school:****What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school?**

85%

**How was this data collected and calculated? (Maximum 50 words)**

Data is collected through examining bus records and observing student drop off and pick up.

**Which of the following policies or programs has your school implemented:**

Our school has a well-publicized no idling policy that applies to all vehicles (including school buses). Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.

**Describe how your school transportation use is efficient and has reduced its environmental impact. (50 word Maximum)**

We have provided efficient bus service so that all students are eligible to ride the bus. We have talked to the bus companies about making the routes efficient, making the times as short as possible with use of group stops if possible. Pick up and drop off for carpools has been encouraged and staff meets students in the morning and loads cars in the afternoon to make the process quick friendly, and simple.

**Describe any other efforts towards reducing environmental impact, focusing on innovative or unique practices and partnerships. (100 word Maximum)**

- \*collect coffee grounds from local coffee shop for our compost.
- \*Maximum recycling of paper, plastic, and metals. All classrooms have recycling bins that are emptied by students and/or teachers into the municipal bins, which are collected weekly.
- \*Plastic shopping bag- community collection bin.
- \*Terra-cycle collection bin for appropriate containers.Used by community.
- \*Array of 24 photovoltaic solar panels on the main building that generate electricity for school use.
- \*Art projects that incorporate recycled/repurposed materials.
- \*new energy saving computers,use of energy efficient light bulbs, shutting off energy consuming devices-reduced energy usage by 40%.

## 12. Page Eleven

**What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use:**

We do not use pesticides. We have an integrated pest management system that guides our approaches. The approaches include maintenance of habitats for insects. We will move a hive if necessary and if a student is stung on the playground we mark the area with a flag and students avoid that area for a period of time.

It is therefore the policy of The Compass School to incorporate integrated pest management (IPM) procedures into the school maintenance and housekeeping program for control of indoor and outdoor pest problems.

**Which of the following practices does your school employ to minimize exposure to hazardous contaminants? (Please check all that apply)**

Our school prohibits smoking on campus and in public school buses.

Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school.

Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO)

Our school does not have any fuel burning combustion appliances

Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L.

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure.

**Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. (100 word maximum)**

The only chemicals routinely used in the school are those used for cleaning tile floors. These chemicals are only used when no students or staff are present. They are stored in a locked closet.

**Describe actions your school takes to prevent exposure to asthma triggers in and around the school. (100 word max)**

We practice green cleaning to reduce unnecessary exposure to respiratory irritants. Our staff is educated in simple cleaning methods for every day use, such as vinegar or lemon juice & water solutions. Staff is also taught to apply these solutions to a microfiber cloth instead of broadly spraying over a wide area.

We have a no smoking policy for school grounds, the school is regularly inspected for mold, animals with fur are not allowed into the building, and daily cleaning and vacuuming controls dust.

We maintain records for students with known asthma issues.

**Describe actions your school takes to control moisture from leaks, condensation, and excess humidity and promptly cleanup mold or removes moldy materials when it is found. (100 word max)**

Any water issues are promptly reported to the school administrator. He then contacts appropriate maintenance people to correct the problem immediately to prevent mold growth. We have not had mold issues but the nurse and administrator regularly inspect the building for any maintenance issues.

**Our School has installed local exhaust systems for major airborne contaminant sources.**

No

**Describe your school's practices for inspecting and maintaining the building's ventilation system and all unit ventilators to ensure they are clean and operating properly. (100 word max)**

Our heating and cooling system is regularly checked and filters are changed by a commercial company. If there is any difficulty with the heating or cooling system maintenance is promptly done to correct the problem.

The outside intake areas are kept clear. Areas around airconditioning units are cleared of growth.

**Describe actions your school takes to ensure that all classrooms and other spaces are adequately ventilated with outside air, consistent with state or local codes, or national ventilation standards. (100 word max)**

Our building has rooms with many windows. Windows are 80" x 36". There is no ventilation concerns since the windows are opened for fresh air. We meet any codes due to the amount of fresh air we are able to obtain by opening windows.

**Describe other steps your school takes to protect indoor environmental quality such as implementing EPA IAQ Tools for Schools and/or conducting other periodic, comprehensive inspections of the school facility to identify environmental health and safety issues and take corrective action. (200 word max)**

We conduct radon tests.

Our heating and cooling system is regularly inspected and maintained. Any maintenance issues are fixed promptly.

The outside air intakes are regularly inspected to be sure they are clear from snow or debris. Bushes near air conditioning vents are cut back.

Thermostates in each room are checked to be sure they are set appropriately for the time of year.

Large, multiple windows in each room allow for plentiful amounts of fresh air.

Kitchen and bathrooms are thoroughly cleaned each day.

Compost, recycling, and waste is kept in proper containers and removed each day to marked bins away from the buildings.

### 13. Page Twelve

**Which practices does your school employ to promote nutrition, physical activity and overall school health? (Please check all that apply)**

Our school participates in the USDA's Healthier School Challenge or another nutrition program.

Our school participates in a Farm to School program or other program to utilize local food in our cafeteria.

Our school has an onsite food garden.

Our school garden supplies food for our cafeteria.

Our students spent an average of at least 120 minutes per week over the past year in school supervised physical education.

At least 50% of our students' annual physical education takes place outdoors.

At least 50% of our students have participated in the EPA's Sunwise program (or other equivalent UV protection and skin health education program).

**Please describe the type of outdoor education, exercise and recreation available. (Maximum 100 words)**

Our students participate in a quality Physical Education program that takes place outside all year long even in the snow! 100% of the program is outside. All students have daily recess outside as well. Regular education classes take place outdoors often.

With over 5 acres of the school land being wooded and wetlands there are many learning activities that occur outside. The mission of our school is environmental sustainability so the children have a great deal of educational experiences outside.

**Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. (Maximum 100 words)**

Our students participate in the Fuel up to Play 60 program which is a program founded by the National Dairy Council and NFL, in collaboration with USDA, that empowers students to take charge in making small, everyday changes at school. Our students regularly eat food from our garden that they helped grow from seed using compost that they helped process. We have a greenhouse, gardens, and a pretty significant composting system. Gardening and sustainability is woven into the curriculum and the students learn about local, fresh foods through first hand experiences. We have regular whole school salad, pasta, and stew day celebrations using ingredients grown in our garden. In Health classes we also make and drink smoothies to increase their consumption of low fat dairy, fruits, and veggies. The children at our school are extremely active. They have Physical Education twice a week and recess daily. Some classes have morning exercises (that take place outside) as a part of their daily

routines. We believe that exercising the body helps the children focus on classwork and helps them perform better in school.

**What percentage (by cost) of food purchased by your school is certified as "environmentally preferable" (e.g. Organic, FairTrade, Food Alliance, Rainforest Alliance, etc.)?**

40%

**Are RI Food Establishment Inspection Reports/Tools for Schools Food Service Checklists used to document compliance and made available to parents?**

Yes

## 15. Page Fourteen

**Which practices does your school employ to help ensure the environmental and sustainability education? (Please check all that apply) Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.**

Our school has an environmental or sustainability literacy graduation requirement: We are not a high school but the mission of our school is environmental sustainability and all students K-8 received education in environmental literacy. It is built into our curriculum.

Environmental and sustainability concepts are integrated throughout the curriculum.: Since environmental education and sustainability practices are part of our mission they are intergrated into not only our curriculum but embedded into our daily life at school. this is true for adults as well as children.Although these concepts are so much a part of our life that it would be clearer to say that we build our curriculum around these concepts.

Environmental and sustainability concepts are integrated into classroom based and schoolwide assessments.: We are a project based school. Teachers use formative assessments to measure whether students learn environmental and sustainability concepts.

Professional development opportunities in environmental and sustainability education are provided for all teachers.: We have 14 professional days. Some of these days are used for professional development in the areas of environmental and sustainability. We share readings in those areas, has discussions not only on professional days but at staff meetings, we have presenters come in, and workshops and conferences are attended by staff.

**If your school serves grades 9-12, please provide the following information:**

Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career : na

Percentage of these students who scored a 3 or higher on the AP Environmental Science exam : na

**How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? (200 word max)**

We define environmental sustainability as meeting people's needs-clean water,food, shelter, and living space-today and in the future while conserving Earth's life support systems

Students, faculty and families participate in a project creating a sustainable system based on biological cycles for growing food.Compass has an extensive gardening and composting program.

- Waste to food. Waste converts to life through biological processes. These biological processes are studied.
- Teaching the cycle of life through soil management and its connection to food.
- All waste should be converted back into the system.
- You need to continually feed the soil with waste to maintain living fertile soil.
- Decaying waster builds fertile blocks for new life.
- All living things from banana peels to manure are broken down by microorganisms decomposing into a form that supports new plant life.
- Waste from plants and animals go right back into the loop.
- This system is contrasted with conventional practices of growing food that are not sustainable. Input and outputs that are not part of a closed loop system and are associated with environmental degradation and other ecological and global problems.

Every subject area is built into the above bullets at all grade levels.

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**How does the school use the facility as a teaching tool for indoor environmental quality, energy efficiency, and renewable energy? (200 word max)**

The school has an extensive array of solar panels on its roof. The energy is used to offset cost of electricity for the school. The panels have been hooked to a computer system so that the generated energy can be viewed and tracked.

Heat and cooling are controlled in every classroom. Discussions are held as to appropriate levels and how to conserve energy through appropriate use. Similar discussions are held regarding use of lights and being sure they are off when not necessary.

Every classroom is involved in recycling and composting. Students learn what products fit into each category. This is monitored.

Students learn that energy saving light bulbs are used.

Students learn to reuse products and not to waste. Paper is reused if possible and both sides of the paper are used.

Students wear indoor shoes to prevent tracking in mud and dirt. This assists in maintaining good indoor air quality.

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**How does your school use sustainability and the environment as a context for learning green technologies and career pathways? (200 word max)**

Environmental sustainability is embedded into the life of the school. Students learn about green technologies and careers through exposure. Many experts assist in classrooms and this gives students the opportunity to see firsthand what they do. Sustainability is also a large part of classroom projects and discussions. Students gain awareness of the different career fields that are available.

Our Eco Fair is another way that students are exposed to various careers. People in various environmental fields participate and set up education booths.

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**Describe students' civic/community engagement projects integrating environment and sustainability topics. (200 word max)**

At the Compass School students learn curriculum through the lens of environmental sustainability and through doing projects. Students, faculty and the community participates in a whole school project creating a sustainable system based on biological cycles for growing food.

We have chosen our school garden as our ongoing whole school project because

Food is a topic all ages can form an immediate connection to.

Ecological and sustainable principles can be applied to its production.

Growing and sharing food provides a means for fostering community.

It promotes our connection to the natural world. Becoming skilled gardeners encourages developing eating habits that promote health and well-being.

It can be directly related to many standard curriculum topics at every grade level.

It embodies a solution to current global, ecological and human health problems that are associated with some aspects of conventional agriculture.

We use a community circle as a representation. The individual student is at the center, next is a pair of students, then the classroom, the school, the local community, and the world. Students learn that you start taking care of yourself but then expand to taking care of others.

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**Describe students' meaningful outdoor learning experiences at every grade level. (200 word max)**

K/1 : exploration of the outside. This is incorporated in writing and literature. Students study animals, birds and insects on school grounds(20 acres).Students record observations in journals.

2nd grade: students record weather changes . They observe and study bodies of water on our campus and study the unique nature of vernal pools, wetlands, and streams. Effect of weather is related to the various bodies of water.

3/4th grade: participation in programs on Audubon Wildlife Refuges. During the coastal explorations students hike through different habitats to Narragansett Bay. Student test for salinity, measure the air and water temperature, and tides. Students collect living and nonliving samples.

Invasive species- a URI professor walks students around the property to identify invasive and native species and tell students how these species arrived and their impact. Students create projects to educate others .

5/6 grades: students study various types of soils and issues such as erosion and farming related to soil.They develop projects to share with an audience about better farming techniques and food production.

7th/8th grade

\* study Narragansett Bay and Estuaries.

- \* Biomimicry- students learn about solving problems using nature's designs.
- \*students study garden and greenhouse culture-including aquaponics and aquaculture.
- \* renewable energy.

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**Please describe professional development opportunities available in environmental and sustainability standards. Include the percentage of teachers who participated in these opportunities over the past 2 years. (Maximum 200 words)**

Reading and discussing the books related to sustainability "Deep Economy" and "Keeping a Nature Journal" .100 % participation.  
Developing a curriculum and presentation based on environmental and sustainable standards. 100 % participation.  
Participation in a workshop:" project learning tree " .  
100% participation.  
Participation in courses on composting and gardening. 10%

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**Describe students' meaningful outdoor learning experiences at every grade level. (200 word max)**

**Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (200 word max)**

Students calculate the area and perimeter of garden beds and playground areas in math. In our gardening program students calculate amount of seeds, amount of various ingredients used in creating planting mediums, cost of operating the gardening program, appropriate price to sell plants at annual eco fair.  
Lettuce and other crops grown in the garden have been donated to food pantries.  
When studying human impact on the land, students have studied the history of the property and its changes over time. When studying mapping, students create a map of the property with symbols, a key, and a compass rose. There has been contact with the local historical society.  
During projects on energy, we focus on solar and wind energy. We use experts and organizations in RI to gather information on wind energy. We share ways for families to support renewable energy such as the Green Up program through National Grid.  
Connecting with "Save the Bay" in salt marsh restoration and eelgrass restoration.  
Connecting with state agencies in salmon-in-the-classroom.  
Partnering with the Audubon Society in a clean up of RI beaches.  
All subject skills are used in these activities and there is connection with community agencies.

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**Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 200 words)**

Every year in November we hold a "Celebration of Local Foods" event, both as a fundraiser and a way to heighten awareness of local food and vendors. Fourteen local farmers, restaurants, and wineries that use local foods as their main source of food donate their time and food. The event is held at a local farm and has been a very popular event. It has served as a way for local vendors to display their products. The event also helped us to raise money for construction of our greenhouse.  
Partnerships with Save the Bay, Master Gardeners, Wood-Pawcatuck Watershed Assoc., RI Wild Plant Society, RI natural History Survey, Narrow River Preservation association, Audubon Society, Apeiron Institute for Sustainable Living.  
We have a good working relationship with all these organizations. We use their services and they provide education for our students and teachers. Teachers also take courses offered by these organizations.  
In a close connection with the Aperion Institute Compass each year participates, and has hosted, a statewide solar car competition.

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**Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships. (Maximum 200 words)**

we have a robotics and solar car program.  
In a 7/8 grade project students study world geography, politics and culture in relation to impact on the environment.  
In a farms project at K/1 level students visit local farms and learn about how changes to the environment impact our food supply. They learn about sources of local foods, how all of the natural world is interconnected, how social systems satisfy human needs, and how farms are a part of the natural and social systems that support human life.  
At the 5/6 level students study the dust bowl in social studies and learn about soils and how important good soil is to a quality

life. This unit includes political and social issues related to the dust bowl era.

At the 3/4 grade level students study local rivers. They study the importance of good water quality and how various human actions can negatively affect water quality. Experts from state agencies work with the students and discuss the various controls that are in place to monitor and maintain good water quality.

Also at the 3/4 level when studying human impact on the land, students have studied the history of the property and its changes over time.

Unique to The Compass School is that students study through a project approach. They research areas of interest and share their results with an audience.

## 16. New Page

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

Environmental and sustainability education is the focus of The Compass School. These topics are not just integrated but embedded into the daily life and curriculum of K-8 students, staff, and parents. A philosophy has been developed by teachers, students, and parents that guides life at Compass.

"Environmental sustainability is meeting people's needs-clean water, food, shelter, and living space- Environmental and sustainability education is the focus of The Compass School. These topics are not just today and in the future while conserving Earth's life support systems. Conserving Earth's life support systems requires maintaining, protecting, and restoring biodiversity and ecosystems. Our goal as teacher is to help our students acquire the knowledge, skills, and values essential to living sustainably on Earth by nurturing an appreciation of the natural world, building an understanding of how nature supports life, and modeling and practicing sustainability at school and in our community."

Three areas are important to this philosophy:

### 1. Appreciating and Bonding with the Natural World

We nurture an appreciation of the natural world in our students through a variety of means. While this varies in depth and scope at each step, some opportunities and activities are common across the grade levels. First and foremost, we give our students frequent opportunities to play in and explore the outdoors. Our students nature journal, read and write about the natural world, and visit beautiful places. We recognize that having frequent opportunities to bond with the natural world nurtures children's physical, cognitive, and emotional health and development.

### 2. Observing and Learning from the Natural World

Students' understanding of the natural world and its systems is further developed through observation and scientific studies. Hands-on explorations are an integral part of The Compass School's authentic education. This is accomplished through scientific inquiry and exploratory activities in and outside of the classroom. We build curriculum around environmental studies.

### 3. Relating to the Natural World/Practicing Sustainability

Students take their newly acquired knowledge and begin to analyze how humans relate to the natural world-both positively and negatively. Topics covered in classroom discussions are applied to real life situations, and the cause and effect of human relationships with the natural world are discussed. In-depth topics of study differ at each grade level and include consumer waste and energy. Each year, student learning culminates in a school-wide Eco Fair in which students educate the broader community through interactive booths and experiments. School-wide sustainability practices are also modeled and encouraged to help ensure that future generations' need are met. Electricity usage was reduced for the past two years by 30%. Sustainability practices include composting, using non-disposable items, packing no-waste lunches, recycling, using regular silverware, using reusable containers for food and water, and encouraging healthy foods for snacks and lunch. After lunch students separate recyclables and compostable materials from other waste and take the materials to appropriate places. Large compost bins are maintained by students. According to parents this concern for good sustainability practices has carried over into home practices.

All students also participate in an ongoing whole-school project, our school garden, to learn about sustainable principles of agriculture and to provide a means for fostering community and connection to the natural world. Several years ago parents constructed a greenhouse. In February students, with teachers and parents, mix soil and create soil blocks. They plant seeds and maintain them until our Eco Fair in May. Some of the plants are sold at the Eco Fair and some are planted in an elaborate series of raised beds. The plants are cared for and in June a school-wide salad day is held for the school community. In October a stew day is held for the school community. The gardens, plant sale, and meals allow teachers to integrate a great deal of learning from all subject areas.

The health of all people working at The Compass School has been considered in developing approaches that minimize the effect on the environment. Our integrated pest policy directs approaches to protect students, especially those with allergies,

while protecting the environment. If a student is stung by an insect he/she reports the sting and it is cordoned off for a couple of days. If there is a nest it is removed rather than destroyed. Plant management has been used as a method of not attracting stinging insects and as a method of asthma control. Asthma control is also naturally managed through good cleaning habits, by students as well as cleaning staff.

We partner with many organizations involved in environment sustainability. This includes

- \*Apeiron Institute for Sustainable Living
- \*Audubon Society of Rhode Island
- \*Narragansett Bay National Estuarine Research Reserve
- \*Narrow River Preservation Association
- \*Rhode Island Natural History Survey
- \*Rhode Island Wild Plant Society
- \*Save the Bay
- \* University of RI Outreach Center (Master Gardeners and Master Composters
- \* Wood-Pawcatuck Watershed Association

## 18. Page Sixteen

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### Email Confirmation

Jan 21, 2013 11:34:58 Skipped: No emails

### Response Location

<b>Country:</b>	United States
<b>Region:</b>	
<b>City:</b>	
<b>Postal Code:</b>	
<b>Long &amp; Lat:</b>	Lat: 38, Long:-97





