

U.S. Department of Education Green Ribbon Schools

2011-2012 Presentation of Nominee to the U.S. Department of Education

Part I - Principal and Superintendent Eligibility Certification2
Part II – Summary of Achievements4
Part III - Documentation and Certification of State Nomination4
Attach State or Nominating Authority's Evaluation of School Nominee (Either application or other
documentation of review)

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

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.

- 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 achieves or comes close to achieving the goals of all three green Ribbon Pillars: 1) environmental impact and energy efficiency; 2) healthy school environments; and 3) environmental and sustainability education.
- 3. The school has been evaluated and selected from among schools within the state or Nominating Authority's jurisdiction (BIE, DoDEA), based on *documented achievement* toward the three Green School Pillars and Elements.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. The school meets all applicable federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

ED-GRS (2011-2012) Page 2 of 5

U.S. Department of Education Green Ribbon Schools 2012

For Public Schools only: (Check	all that apply) [] Charter []	Title I [X] Magnet	[] Choice
Name of Principal Ms. Carida	d Montano		
(Specify: Ms., Miss, Mrs	., Dr., Mr., etc.) (As it should ap	opear in the official re	ecords)
Official School Name TERRA			r
School (A	s it should appear in the official	records)	
Mailing Address 11005 SW 8	4 Street		
IVIICITII	address is P.O. Box, also includ-	e street address.) Florida	33173
City		State	Zip
County <u>Dade</u>	State School Code Numb	per*13	
Telephone (305) 412-5800	Fax (305) 412-5	801	
Web site/URL_http://terrawolve	s.com E-r	_{nail} cmontano@da	deschools.ne
I have reviewed the informat requirements on page 2-4, and cer	ion in this application in the	ding the award and ledge all information	nd eligibility is accurate.
(Principal's Signature)	Date_		
Name of Superintendent* Mr. Al	berto M. Carvalho		
	ecify: Ms., Miss, Mrs., Dr., Mr.,	Other)	
District Name* Miami-Dade Co	ounty Public Schools Tel.(3	05) 995-1430	
I have reviewed the information requirements on page 2-4, and cer I concur that this is one of the high			d eligibility is accurate.
(Superintendent's Signature)		3/8/12	

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

PART II – SUMMARY OF ACHIEVEMENTS

Instructions to School Principal

Provide a concise and coherent "snapshot" that describes how your school is representative of your state's highest achieving green school efforts in approximately 600-800 words. Summarize your strengths and accomplishments. Focus on what makes your school worthy of the title U.S. Department of Education Green Ribbon School. Be sure to note if students were actively involved in preparing the application.

This summary should be written as a stand-alone document. It will provide the ED review panel with an overview of the school's green activities that were detailed in the application to the state, DoDEA or BIE evaluators. If the school is awarded a U.S. Department of Education Green Ribbon, this information may be shared with other schools, candidates for next year, the press, and the public.

PART III – DOCUMENTATION OF STATE EVALUATION OF NOMINEE

Instructions to Nominating Authority

For the pilot year, the Nominating Authority must review nominated schools for high achievement based on the schools' *documented achievement* toward reaching the goals of each of the three U.S. Department of Education Green School Pillars and elements. For each school being nominated by the Authority to ED, please attach state (or equivalent) evaluation materials (application) based on the Nominating Authority Evaluation Support Framework provided by ED to facilitate your evaluation of schools.

The Nominating Authority must review and sign the following certification for each school being nominated to ED.

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.

- 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 achieves or is one of those overseen by the Nominating Authority which comes the closest to achieving the goals of all three green Ribbon Pillars:
 - 1) environmental impact and energy efficiency; 2) healthy school environments; and
 - 3) environmental and sustainability education.
- 3. The Nominating Authority has evaluated the school and selected it for submission to the U.S. Department of Education from among those schools overseen by the Nominating Authority which have applied for a Green Ribbon, based on *documented achievement*

ED-GRS (2011-2012) Page 4 of 5

toward the three Green School Pillars and Elements.

4. The school meets all applicable federal civil rights and federal, state, tribal and local health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Agency	Florida Department of Education
Name of Nominating Authority	Commissioner Gerard Robinson
7 Idenority	(Specify: Ms., Miss, Mrs., Dr., Mr., Other)
requirements on pages verification assessment Presentation Form.	aformation in this application, including the award and eligibility is 2-4, and certify, to the best of my knowledge through a documentary in that the school meets the provisions in this Part of the Nominee Date 3 21 12
(Nominating Authorit	vls Sionature)

Note to Nominating Authority: The application, including the signed certifications and documentation of evaluation in the three pillars should be converted to a PDF file and emailed to Director, ED-Green Ribbon Schools at green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

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.

Part II. Summary of Achievements.

TERRA Environmental Research Institute is the first Green Gold LEED (Leadership in Energy and Environmental Design) Certified Science Magnet High School in the nation. Inspired by global environmental conservation initiatives and Science, Technology, Engineering and Mathematics (STEM) national programs, TERRA opened its doors in the fall of 2009 and was established in the community as a sanctuary of academic excellence and environmental stewardship. TERRA's students utilize Engineering, Medical, and Biological sciences to promote scientific knowledge and conservation techniques under the supervision of highly qualified faculty members.

Students conduct environmental studies in scientific laboratories where they utilize tools such as aquariums to model natural water systems, biotechnology instruments to manipulate plant genetic material, and computers to publish and publicize their findings. Students are afforded the opportunity to conduct research outdoors in the school's greenhouse and composting sites, agricultural grounds, and aquaculture research facilities (built and maintained by students) for native species. Students utilized research from these sites to calculate the data used for the Green Ribbon Application. Students promote literacy by regularly sponsoring "Reading on the Green" sessions in which students bring a book and a blanket to the school fields to read under the natural light and the trees in our beautiful campus.

The success of the school lies in the students' ability to bridge classroom lessons with the real world dilemmas that our society faces. Students serve as national ambassadors to promote environmental conservation through their participation in national competitions and community internships with higher research entities. Students design, develop, and test robotic inventions as solutions to environmental issues working with the Dumond Conservancy to create a tree-climbing robot fitted with a camera to monitor endangered species in the Amazon. TERRA students partner with multiple underperforming schools in our community and serve as mentors for elementary school children, presenting lessons on conservation and sustainable practices. Students initiate and manage multiple school activities that range from park clean-ups, recycling campaigns, farmers' markets to carpooling placement services.

Students graduating from TERRA Environmental Research Institute will have a strong background not only in the environmental concerns facing our planet and its positive solutions for human kind, but will also hold the necessary skills to be recognized as global leaders.

TERRA Environmental Research Institute is dedicated to empower students with the knowledge to understand and care for the environment. TERRA provides students with preparation, encouragement, and inspiration for higher learning. Our ultimate goal is to prepare students to become environmental ambassadors for humanity and to deliver the message that a sustainable relationship with the Earth is possible. If selected as the U.S. Green Ribbon School, TERRA student leaders are uniquely equipped to become green ambassadors to other students in the nation to assist them in identifying ways in which they can lead their schools to adopt more eco-friendly methods and impact our relationship with earth to minimize our footprint.

Awards and Achievements

- TERRA Environmental Research Institute was awarded the Gold Certification by the United States Green Building Council for Leadership in Energy and Environment Design (LEED)
 Certification, the first in Miami-Dade County.
- TERRA has been awarded the school grade of "A" by the Florida Department of Education for the 2009-2010 and the 2010-2011school year.
- TERRA was awarded the 2012-2013. Magnet Schools of America School of Distinction Award.
- TERRA has been selected for three years in a row by the Massachusetts Institute of Technology
 (MIT) to participate in the Lemelson MIT Invent Competition. TERRA's students received the
 Lemelson MIT Excite Award and were invited to participate in the Eureka Festival.
- TERRA's students were invited to participate in the *Modesto Maidique Biomedical Symposium* at Florida International University to research multiple topics in biomedicine while shadowing university professors and researchers. TERRA's students have patented a battery design and robotic devices. Students have contributed to the publishing of scientific data in science national journals.

- TERRA's Robotics club competed in the national Robotics Design Systems Competitions also known as VEX and the For Inspiration and Recognition of Science and Technology (FIRST) Robotics competition for three consecutive years.
- The TERRA-Dumond Conservancy partnership was recently awarded at \$40,000 grant to fund the outreach student-led *Monkey Environmental Education Program (MEEP)* that allows students to conduct research projects on environmental conservation in the Monkey Jungle Reserve. Students in this club create multimedia messages about global environmental sustainability displayed at Monkey Jungle and mentor elementary school children in underperforming local schools.
- TERRA was selected by the Discovery Channel to host the premiere of their Life series hosting more than three-hundred school board members and film producers.
- TERRA's student's participation in the *Farichild Botanical Garden Challenge* has earned the school over 40 medals and honorable mention awards for three years in a row.

Green Ribbon Schools Florida Application with Resources

Response ID: Data

3. Page Three

School Contact Information

School Name

TERRA Environmental Research Institute

Street Address

11005 SW 84 Street

City

Miami

State

FL

Zip

33173

School Website

TERRA.dadeschools.net

Principal First Name

Caridad

Principal Last Name

Montano

Principal Email Address

cmontano@dadeschools.net

Principal Phone Number

305412-5801

Lead Applicant First Name (if different from principal)

Debbie Ebbert

Lead Applicant Last Name (if different from principal)

Angela Holbrook

Lead Applicant Email

ebbert@dadeschools.net

Lead Applicant Phone Number

305-807-4627

Level

K - 12

School Type

Public

What is your student population?

1352

How would you describe your school?

Private/Independent

District (county) and Code

13 DADE

Does your school have at least 40 percent of your students from a disadvantaged background (i.e., eligible for free or reduced price lunch)?

Yes

My Principal and Superintendent are aware of and in support of this application.

Yes

5. Page Five

Q CC1: Is your school participating in local, state, or nationally recognized green school program which asks you to benchmark progress in some fashion (for example, National Wildlife Federation Eco-Schools USA, Green Schools Alliance, Collaborative for High Performance Schools, or Project Learning Tree's Green Schools!)?

Yes

Which program(s) are you participating in and what level(s) have you achieved?

Dream in Green and Gold LEED Certification

Q CC2: Has your school, staff or student body received any awards for environmental or sustainability stewardship/action?

Yes

Please list the awards you have received and the years you received them.

Gold LEED 2011, Dream in Green 2011, State Farm Youth Advisory Award for DuMond Conservancy Initiative 2011, Fairchild botanical Garden Challenge 2010 and 2011

7. Page Seven

Q1A1: Can your school demonstrate a reduction in its Greenhouse Gas emissions?

Yes

If yes, please provide the following information:

Initial GHS emissions rate (MT eCO2/person) : 0.11 MT eCO2 / Person Final GHG emissions rate (MT eCO2/person) : 0.06 MT eCO2 / Person

Percentage reduction: 54%

Time period measured (mm/yyyy - mm/yyyy): 08/2011 - 12/2011

How did you document this reduction (e.g., the inventory module from Clean Air Cool Planet's Campus Carbon Calculator)? : Learn Green Energy Dashboard.

Q1A2: Has your school received EPA ENERGY STAR certification or does it meet the requirements for ENERGY STAR certification?

Nο

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

Q1A3: Has your school reduced its total non-transportation energy use from an initial baseline?

Nο

If yes, please provide the following information:

Q1A4: What percentage of your school's energy is obtained from:

On-site renewable energy generation: 0

Purchased renewable energy: 0

In what year was your school constructed?

2009

What is the total building area of your school?

178,008 sq ft

Q1A5: Has your school constructed a new building or renovated an existing building in the past ten years?

Yes

If yes, please provide the following information:

Percentage of the building area that meets green build standards (for example, LEED, CHPS, Green Globes or other standards)

: 100

Which certification did you receive and at what level?: LEED for Schools 2007 Gold Certification

What is the total constructed area? : 178,008 sq ft

What is the total renovated area?: 0

Q1A6: Do any parts of your <u>existing</u> buildings meet green build standards (for example, LEED, CHPS, Green Globes, or other standards)?

Yes

If yes, please provide the following information:

What percentage of the existing building area has achieved green build standards (e.g., LEED, CHPS, Green Globes, or other standards)?: 100

What is the total building area (in sq. ft.)?: 178,008 sq ft

Which certificate did the school receive and at what level?: LEED for Schools 2007 Gold Certification

Q1A7: Does your school reduce and/or offset the greenhouse gas emissions from building energy use?

No

If yes, please provide the following information:

Q1A8: Please indicate which green building practices your school is using to ensure your building is energy efficient.

Other (please describe): School has an energy monitoring system in place that measures energy consumption of various systems in real time. Local system is tied to central monitoring station that sounds an alarm in central district when energy consumption exceeds budget. EMS also notifies local school staff when this occurs.

8. Page Eight

Q1B1: Can you demonstrate a reduction in your school's total water consumption (measured in gallons/occupant) from an initial baseline?

Yes

If yes, please provide the following information:

Percentage reduction domestic: 270,000 Gallons per month
Percentage reduction irrigation: 70,000 Gallons per month
Time period measured (mm/yyyy - mm/yyyy): 08/2011- 02/2012

How did you document this reduction (i.e., ENERGY STAR Portfolio Manager, school district reports)?: Learn Green Real

Time Dashboard

Q1B2: Which of the following practices does your school employ to increase water efficiency and ensure quality? (Please check all that apply)

Our school conducts annual audits of the facility and irrigation systems to ensure they are free of significant water leaks and to identify opportunities for savings.

Our school's landscaping is water-efficient and/or regionally appropriate.

Our school uses alternative water sources (ie. grey water) for irrigation before potable water.

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

What percentage of your total landscaping is considered water-efficient or regionally appropriate? : 60% What types of plants are used and where are they located? : Native species that require low irrigation.

Please describe the alternate water sources used for irrigation. (Maximum 100 words)

Student manufactured rain barrels and air conditioning condensation water sources.

Please describe the program you have in place to control lead in drinking water. (Maximum 100 words)

Q 1B3: Our school's drinking water comes from:

Municipal water source

Please describe how the water source is protected from potential contaminants. (Maximum 100 words)

Q1B4: Please describe any additional progress your school has made towards improving water quality, efficiency, and conservation. (Maximum 200 words)

The entire school is fitted with low flow toilets and plumbing fixtures which are tested regularly. Posters were placed in strategic areas of the building and public service announcements created by the Environmental Studies students were broadcast throughout the buildings informational monitors.

9. Page Nine

Q 1C1: 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). : 96 cubic yards per month
- B Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected). : 24 cubic yards per month
- 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). : 2.5 cubic yard per month Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: 21.6

Q 1C2: 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 by the Forest Stewardship Council, Sustainable Forestry Initiative, American Tree Farm System or other certification standard? (If a product is only 30% recycled, only 30% of the cost

should be counted)

100%

Q 1C3: What percentage of the total office/classroom paper content by cost is totally chlorine-free (TCF) or processed chlorine free (PCF)?

100%

Q 1C4: Please provide the following information about your school's hazardous waste:

How much hazardous waste does your school produce (lbs/person/year)?: 0

How is the generated amount calculated? : science dasroom materials

How is hazardous waste monitored? : by dasroom teachers.

Q 1C5: Which of the following benchmarks has your school achieved to minimize and safely manage hazardous waste? (Please check all that apply)

Which green cleaning standard is used?

Q1C6: Does your school use "third-party certified" green cleaning products?

No

If yes, please provide the following information about the green cleaning products used in your school:

Q 1C7: What other indicators do you have of your school's reduction of solid waste and elimination of hazardous waste? (Maximum 200 words)

Separate recycling bins for paper/cardboard, plastic/metal, and glass are provided in strategic locations throughout the school. Organic waste from the cafeteria is composted by the Environmental Studies students on campus and used in the school garden. Paper recycling containers are located in the copy room and throughout the school offices. Art, engineering, and other programs utilize reused and recycled parts in their work. Use of PowerPoint presentations, online quizzes and tests, and Promethean boards is encouraged to reduce paper consumption. The use of hazardous materials is prohibited in the public schools. However, any biological waste, such as dissections, is disposed of in red bio-hazard bags. Biohazardous material from the clinic is collected in a biohazard box. All biohazardous waste is then picked up by the county agency.

Q 1D1: What percentage of your students walk, bike, bus, or carpool (i.e., two or more students in the car) to/from school?

32%

How was this data collected and calculated? (Maximum 100 words)

This data was collected by student obervation and compilation of data over a period of one month. The ressults were calculated and averaged.

Q 1D2: Which of the following policies or programs has your school implemented:

Our school has designated carpool parking stalls.

Q 1D3: Describe how your school transportation use is efficient and has reduced environmental impacts (e.g., the percentage of school-owned electric/hybrid/alternative fuel vehicles in your fleet or other indicators of significant reductions in emissions). (Maximum 100 words

Teachers and students are encouraged to economize and reduce their use of fuel through a variety of educational and environmental means. The school provides educational displays on video monitors throughout the school building on means of fuel economy and efficiency and priority designated parking stalls for fuel efficient vehicles and carpool participants. The school is a part of a natural hammock reserve park, and is surrounded by a green zone which disallows the regular use of diesel buses and trucks.

Q 1D4: What percentage of the school grounds are devoted to ecologically benefical uses (e.g., school vegetable garden, wildlife or native plant habitats, outdoor classroom, environmental restoration projects, rain garden) or socially/culturally benefical uses (e.g., playgrounds, outdoor spaces designed and used regularly for social interaction,

65%

Q 1D5: This concludes Pillar 1. Please describe any other accomplishments or progress your school has made towards reducing/eliminating environmental impacts or improving your energy efficiency. (Maximum 200 words)

TERRA Environmental Research Institute is a Green Gold LEED (Leadership in Energy and Environmental Design) Certified Science Magnet High School. TERRA Environmental Research Institute, has three academies: Environmental Research and Field Studies (ERFS), Biomedical Research (BR) and Robotics and engineering Technology (RET). ERFS students conduct environmental studies in scientific laboratories where they utilize tools such as: aquariums to model natural water systems, Biotechnology instruments to manipulate plant genetic material, and computers to publish their findings. ERFS students are afforded the opportunity to conduct research outdoors in the school's greenhouse, agricultural grounds and composting sites. BR Academy students gain extensive knowledge in Human Anatomy and Physiology through active student research experiments in environmentally sustainable methods in Molecular Biotechnology and Genetics. BR students at TERRA also serve as national ambassadors to promote environmental conservation through their participation in national competitions and community internships with higher research entities. RET Academy students design, develop and test environmentally sustainable robotic inventions as solutions to environmental issues tested through local, state and national competitions.

11. Page Eleven

Q2A1: Which of the following practices does your school employ with regards to pest management? (Please check all that apply)

Our school has an integrated pest management plan in place to reduce and/or eliminate pesticides.

Copies of pesticide labels, copies of notices, MSDS and annual summaries of pesticide applications are all available and in an accessible location.

Our school prohibits children from entering a treated area for at least 8 hours after the treatment or longer if required by the pesticide label.

Q2A2: Which of the following practices does your school employ to improve contaminant control and ventilation? (Please check all that apply)

Our school has a comprehensive indoor air quality management program that is consistent with Indoor Air Quality (IAQ) Tools for Schools.

Our school meets ASHRAE Standard 62.1-2010 (Ventilation for acceptable indoor air quality).

Our school has installed one or more energy recovery ventilation systems to bring in fresh air while recovering the heating or cooling from the conditioned air.

Our school has eliminated mercury-containing thermometers, chemical compounds, art chemicals, etc. and elemental mercury.

Our school disposes of any unwanted mercury laboratory chemicals, thermometers and other devices in accordance with federal, state, and local environmental regulations.

Our school has Carbon Monoxide alarms that meet the requirements of the National Fire Protection Association code 720. There are no wood structures on school grounds that contain chromate copper arsenate.

Our school visually inspects all structures on a monthly basis to ensure they are free of mold, moisture and water leakage. Our school's indoor relative humidity is maintained below 60%.

Our school has moisture resistant materials/protective systems installed (i.e., flooring, tub/shower, backing, and piping). Our school prohibits smoking on campus and in public school buses.

All of the ground contact classrooms at our school have been tested for radon within the last 24 months.

If your school has combustion appliances, is there an inventory of them and are they annually inspected to ensure they are not releasing Carbon Monoxide? (yes/no/no combustion appliances): no combustion appliances are found in the school What percentage of all classrooms with radon levels greater than 4 pCi/L have been mitigated in conformance with ASTM E2121?: 0

Q2B1: Which practices does your school employ to promote nutrition, physical activity and overall school health? (Please check all that apply)

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 students spend 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.

Please list your school's USDA HealthierUS School Challenge award level or describe other nutrition program. (Maximum 100 words)

Please describe the type of outdoor exercise opportunities and nature-based recreation available to students. (Maximum 200 words)

All Physical Education courses at TERRA are conducted outdoors. Every students is required to take two semesters of phisical education and personal training courses for graduation. Students at TERRA may choose from multiple outdoor exercise activities such as yoga, strength and cardiovascular training regimens, running, jogging, and skateboarding around the park. TERRA's extracurricular activities include the following outdoor sports: swimming, water polo, basketball, baseball, softball, soccer, cross country and track and field, tennis, golf, cheerleading and dance.

Q2B2: What percentage (by cost) of food purchased by your school is certified as "environmentally preferable" (e.g., Organic, FairTrade, Food Alliance, Rainforest Alliance)?

100%

Q2B2.5 Does your school implement the coordinated school health model?

No

Q 2B3: This is the end of Pillar 2. Please describe any additional progress your school has made <u>in terms of the school's built and natural environment</u> (including unique community and/or business partnerships) to promote overall student and staff health and safety. (Maximum 200 words)

TERRA's primary sponsor is Wholefoods Market. Their presence in our school is visible during daily activities such as farmers markets, club fairs and field trips through their sponsorship of healthy snacks and foods. The TERRA-Wholefoods partnership hosted a book sign in and presentation by author of the "Engine Two Diet" Rip Esselstyne at TERRA and movie screenings for award winning environmental films such "Forks over knives" and "Jane's Journey". At our partnership events, parents and students are encouraged through education to improve their overall health through improved dietary choices. Wholefoods market has provided samples of vegetarian cuisine, health food "goodie bags", healthy smoothies and healthfood gift baskets at a variety of school events. The TERRA student government association has introduced healthier school lunch options, such as vending machines featuring yogurt and vegetarian wraps, and sushi.

14. Page Fourteen

Q3A1: Which practice(s) does your school employ to help ensure the environmental and sustainability literacy of your graduates? (Please check all that apply)

Our school has an environmental or sustainability literacy graduation requirement.

Environmental and sustainability concepts are integrated throughout the curriculum.

Environmental and sustainability concepts are integrated into dassroom-based and schoolwide assessments.

Professional development opportunities in environmental and sustainability education are provided for all teachers.

Please describe your school's environmental or sustainability literacy graduation requirement. (Maximum 200 words)

TERRA's students are afforded opportunities to include innovative ideas to be developed into youth led research projects in every aspect of the school's curriculum. Under the guidance of dynamic leadership, departments seek to find innovative teaching methods that bridge together National and State Environmental Standards. Every student at TERRA is required to complete a graduating portfolio that consists of multiple scientific research projects in environmental topics including a field experience community internship and a certification in their area of studies.

Please describe your classroom-based or schoolwide assessments in environmental and sustainability concepts and include what percentage of students scored "proficient" or better. (Maximum 200 words)

TERRA's students are currently enrolled in Advanced Palcement Environmental Research courses. Since TERRA has only been opened for two years, this year's data will be the first achievement measurement in this area. TERRA's students are expected to obtain over 70% of passing rates on this course based on their performance of previous AP courses that include environmental studies such as Advance Placement Human Geography and practice diagnostic tests.

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

TERRA's Faculty is often afforded the opportunities to partake on multiple environmental and susatinability professional development sessions by educational organizations such as "The Dream in Green Schools Challenge", The Fairchild Torpical Botanical Gardens", The Florida Environmental Educators monthly workshops, The Sierra Club, and Wholefoods Market.

Q3A2: If your school serves grades 9-12, please provide the following information:

What percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career? : this data is not available since we are a new school.

What percentage of these students who scored a "3" or higher on the AP Environmental Science exam? : This data is not available since we are a new school

Q3B1: Do your school's science courses frequently use sustainability and the environment as a context for learning science (e.g., asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations, and engaging in argument from evidence when exploring environmental and sustainability issues)?

Yes

Please describe. (Maximum 200 words)

TERRA Environmental Research Institute, has three academies: Environmental Research and Field Studies (ERFS), Biomedical Research (BR) and Robotics and engineering Technology (RET). ERFS students conduct environmental studies in scientific laboratories where they utilize tools such as: aquariums to model natural water systems, Biotechnology instruments to manipulate plant genetic material, and computers to publish their findings. ERFS students are afforded the opportunity to conduct research outdoors in the school's greenhouse, agricultural grounds and composting sites. BR Academy students gain extensive knowledge in Human Anatomy and Physiology through active student research experiments in environmentally sustainable methods in Molecular Biotechnology and Genetics. BR students at TERRA also serve as national ambassadors to promote environmental conservation through their participation in national competitions and community internships with higher research entities. RET Academy students design, develop and test environmentally sustainable robotic inventions as solutions to environmental issues tested through local, state and national competitions.

Q3B2: If your school is a high school, does your school curriculum make connections between classroom and college and career readiness, in particular post-secondary options in environmental and sustainability fields (e.g., CTE Green Sustainable Design and Technology course)?

Yes

Please describe these college and career connections. (Maximum 200 words)

TERRA's highly qualified teachers are also dually certified to teach college courses for TERRA students. TERRA's College Preparatory curriculum includes a wide array of certifications in multiple fields of green design and sustainability.

Q 3C1: Do students conduct an age-appropriate, self-selected, civic/community engagement project at every grade level?

Yes

If not in all grades, please specify which grades.

What percentage of last year's graduates scored proficient or better on a community or civic engagement skills assessment?

100%

Please provide the following information:

What percentage of these projects focus on environmental or sustainability topics? : 50% What percentage of students completed such a project last year? : 20%

Q 3C2: Do students have meaningful outdoor learning experiences (experiences that engage students in critical thinking, problem solving and decision making) at every grade level?

Yes

If not in all grades, please specify which grades.

Please share how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. (Maximum 200 words)

Local educational parks such as the Fairchild Botanical Garden, the Miami Zoo, and Monkey Jungle have shared their resources for professional development sessions, fields trips and outreach programs. TERRA hosts Farmers' Markets on campus. Local farmers who are members of our "Farm to school" program that bring fresh local produce to our school cafeteria foods are hosted in tents next to multiple other community partners that set up booths parallel to our student clubs and extracurricular service learning projects. The Miami Dade County Parks Association has granted TERRA's students the ability to manage all environmental decisions concerning the 54 acre park surrounding the school. TERRA faculty members utilize the Indian Hammocks City Park and natural preserve where the school is located as an environmental research laboratory. Reading teachers at TERRA regularly hold "reading on the green" sessions which consists of students bringing a book, a blanket and a bottle of water out into the school fields to read under the natural light and the trees in our beautiful campus.

Q3C4: Please describe your partnerships with the local community (e.g., academic, business, government, nonprofit and informal science institutions) to help advance your school, other schools (especially schools with fewer resources) and the greater community toward the 3 Pillars. Include both the scope and impact of these partnerships. (Maximum 300 words)

TERRA's faculty fosters excellent relationships with the local universities that invite our students to shadow researchers, conduct experiments, and present at symposiums. TERRA's parents attend monthly workshops by to learn how to accessing their child's grades, drug prevention, stress management, and internet safety. The traditions that TERRA students created in only two years are centered on the school's philosophy of "changing the world." Students participate in Civitan and Interact service clubs. The students studied economic and environmental factors of poverty in third world countries and devised the "TERRA Forest in Haiti Project," raising native plants from seeds in recycled water bottles in our greenhouse, then later developed pen pal relationships with Haitian students and raised money for school supplies. Another student-led service project is the Monkey Environmental Education Project, in which students use multimedia technology to raise local and global awareness of the fragility of rainforest ecosystems and underscore the importance of preservation and responsibility. They published podcasts, conducted presentations at inner-city schools, and created a permanent educational exhibit at Monkey Jungle. Working with experts from the Dumond Conservancy and Monkey Jungle, students from multicultural backgrounds have strengthened their knowledge and skills in effective conversation, environmental advocacy, and social marketing strategies. TERRA's primary sponsor is Wholefoods Market, partnering in farmers markets, club fairs, and field trips through sponsorship of healthy foods, hosting book signings and author presentations, and movie screenings for award winning environmental films such "Forks over Knives" and "Jane's Journey". TERRA's partner, Barnes and Noble, sponsors poetry readings and contributes Kindles to our reading programs. Motorola's engineers work with TERRA's robotics dub to develop projects for competitions such as FIRST, Exxon Eco Challenge, and MIT Invent Teams.

Q 3C5: This is the end of Pillar 3. Please describe other methods and measurements your school uses to ensure matriculating students are environmentally and sustainability literate. (Maximum 200 words)

TERRA Environmental Research Institute is dedicated to empower students with the knowledge to understand and care for the environment and provides students with preparation, encouragement and inspiration for higher learning. Our ultimate goal is to prepare students to become environmental ambassadors for humanity and to deliver the message that a sustainable relationship with the Earth is possible. Our faculty creates an environment constantly delivering conservation messages in every aspect of the school's daily lessons. Students graduating from TERRA will have a strong background not only in the environmental concerns facing our planet and its positive solutions for human kind, and the necessary skills to be recognized as global leaders. TERRA's faculty enrich classroom lessons with the real world environmental global dilemmas that our society faces. Complex service learning project ideas are devised in classrooms and carried out during extracurricular events. TERRA's students partner with multiple underperforming schools in our community and serve as mentors for elementary school children. TERRA activities are sponsored by multiple community stakeholders and local business that recognize that

our student led service p	rojects seek to imp	prove the lives of	fall members in ou	ır community.	
6. Page Sixteen					
mail Confirmation					



U.S. Department of Education Green Ribbon Schools

TECHNICAL REVIEW

Nominee TERRA Environmental Research Institute, 9-12, 11005 SW 84 St. Miami, F. 33173, Miami-Dade Public School District			W 84 St. Miami, FL
I	Evaluation Issues	Approvable	Special Notes
Florida Department of Environment Protection: Checked all records available regarding environmental violations for this school. Reviewer Name and Title: Greg Ira, Director DEP-OEE Cristina Llorens, Public Relations Manager FL-DEP		Yes X No	None
U.S. Department of Labor: Occupational Safety & Health Administration (OSHA) Checked referred database for compliance with OSHA regulations at Federal and state levels. http://www.osha.gov/pls/imis/establishment.html Listed by: Ms. Rivera, Officer on duty, OSHA Fort Lauderdale Reviewer Name and Title: Romina Sola, Coordinator Florida Green School Network		Yes X No	None
Florida Department of Agriculture and Consumer Services: Checked compliance with regulations related to National School Lunch Program Reviewer Name and Title: Linda Miles, Program Administrative Team Director, Food, Nutrition and Wellness		Yes X No	None
Education Act (IDEA) Reviewer Name and Title:	cation: USDOE Individuals with Disabilities Patricia Howell, Program Director of ce, Bureau of Exceptional Education &	Yes X No	None



U.S. Department of Education Green Ribbon Schools

NOMINATION SCORE SHEET

The following score sheet is to be completed for each nomination submitted to the Florida Department of Education for the U.S. Department of Education Green Ribbon Schools program.

Introduction

The U.S. Department of Education's Green Ribbon Schools (ED-GRS) award is intended to recognize those schools that are taking a comprehensive approach to greening their schools. A comprehensive approach incorporates and integrates environmental learning with maximizing positive environmental and health impacts.

The National Green Ribbon Schools program focuses on three pillars:

Pillar I: Environmental Impact and Energy Efficiency

Pillar II: Healthy School Environments

Pillar III: Environmental and Sustainability Education

This is a two-step process. The first step is to complete and submit an application to the Florida Department of Education to be selected as a state nominee. The second step is for the Florida Department of Education to review the judges' scores and select up to four nominees to be forwarded to the U.S. Department of Education.

All public and private K-12 schools are eligible to apply for the Green Ribbon Schools designation. Schools are to be evaluated based on their progress towards a wide variety of green benchmarks, including zero greenhouse gas emissions, food that is locally sourced and sustainable, and curriculum that ensures all students are environmentally and sustainability literate.

As you review the nominees, please keep in mind:

- 1. These are ambitious goals and few, if any, schools are expected to have achieved all three, or even 100% of any one of the Pillars.
- 2. Schools demonstrating exemplary achievement in all three Pillars should receive the highest ranking.
- 3. It is important that nominees demonstrate concrete achievement, using quantified measures, whenever possible.

The score sheet parallels the nomination form. Each section has a highest point potential already identified. Based on the information provided, you may award up to the maximum number of points in each element within each pillar.

Nominee	

For this nominee, please use this table to score each Pillar and its Elements.

Cross Cutting Questions - 5%	Points	Score
Participation in Green School Programs and/or awards for environmental and sustainability efforts, along with commitment of school organization	5 points	

Pillar I Environmental Impact and Energy Efficiency 30%	Points	Score
Element IA: Improved energy conservation/energy-efficient building(s)	15 points	
Element IB: Improved water quality, efficiency, and conservation	5 points	
Element IC: Reduced waste production and improved recycling and composting programs	5 points	
Element ID: Use of alternative transportation to, during, and from school	5 points	
	Subtotal	

Pillar II - Healthy School Environment -30%	Points	Score
Element IIA: An integrated school environmental health program	15 points	
Element IIB: High standards of nutrition, fitness, and quantity of quality outdoor time	15 points	

Pillar III Environmental and Sustainability Education 35%	Points	Score
Element IIIA: Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems	20 points	
Element IIIB: Use of the environment and sustainability to develop Science, Technology, Engineering, and Mathematics (STEM) content, knowledge, and thinking skills	5 points	
Element IIIC: Development and application of civic engagement knowledge and skills	10 points	
	Subtotal	

Cross Cutting Questions	
Pillar I – Subtotal	
Pillar II - Subtotal	
Pillar III - Subtotal	
Grand Total	

Name	Signature