



2015-2016 School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2015-2016

Public Charter Title I Magnet Private Independent Rural

Name of Principal: **Mr. Paul Bianchi**

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

Official School Name: **Paideia School**

(As it should appear on an award)

Official School Name Mailing Address: **1509 South Ponce de Leon Avenue, Atlanta, GA 30307**

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

County: DeKalb State School Code Number *: **N/A**

Telephone: 404-377-3491 Fax: **404-377-0032**

Web site/URL: **http://www.paideiaschool.org/** E-mail: **bianchi.paul@paideiaschool.org**

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

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

Principal's Signature

Date: **1/26/16**

(Principal's Signature)

Name of Superintendent: **Mr. Paul Bianchi**



District Name: **Private**

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

[Signature]

(Superintendent's Signature)

Date: **1/26/16**

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: **Georgia Department of Education**

Name of Nominating Authority: **Mr. Richard Woods**
(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.

Richard Woods

(Nominating Authority's Signature)

Date: **1/28/16**

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your school is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars. Then, include concrete examples for work in every Pillar and Element. Only schools that document progress in every Pillar and Element can be considered for this award.



Paideia School is a non-profit, urban, independent Pre-K - 12 school with a commitment to the environment and to social responsibility as part of our Framework of Values. In addition to our expectation that our students exhibit excellence and hard work, we encourage them to take responsibility for the environment and to advocate preservation and protection of the natural world.

Paideia's commitment is evident throughout the school: in our facilities, construction and renovation, land and resource stewardship, curriculum, professional development, the Parent Green Team, the Student Green Team, and community outreach. The Georgia Recycling Coalition, Green Schools Alliance, and U.S. Green Building Council are among many organizations that have recognized Paideia's achievements with commendations and awards.

Since our founding in 1971, Paideia has acted to reduce our impact on the environment. Supporting the adage, "the greenest building is one that is already standing," we preserve and repurpose existing buildings, retrofitting for energy efficiency. In 2007, we constructed one of the first LEED certified school buildings in Atlanta. One notable design feature of this building is buried beneath our Campus Green: a geothermal heating system, which significantly reduces the cost and impact of heating and cooling. When one of our buildings was devastated by fire, we salvaged materials, pulling granite and bricks from the rubble to use in new stairs and walkways. The rebuild for that building received LEED Gold certification in 2010.

In addition to minimizing our environmental impact via energy efficient construction, Paideia works to lessen water and energy usage, incentivize green transportation, and minimize waste production. We have bioretention ponds, water wells and cisterns for landscape maintenance, as well as waterless or low-flow restroom fixtures. Students and staff enjoy parking privileges if they carpool, leading the majority of our community to either carpool or use alternative forms of transportation to school. Most notably, our Parent and Student Green Teams collaborate with staff on a comprehensive waste management program, with "Recycle" and "Compost" bins located alongside "Landfill" bins throughout campus. Organic matter goes directly to our school farm for composting by students. The school holds an annual "Zero-Waste Thanksgiving Feast," feeding almost 1000 people, but producing only a single baggie of trash. Paideia also provides an innovative Reuse-a-Kit (reusable plates, utensils, cups for at least 100) that can be borrowed by anyone in the community, which is used at most parent-hosted social events.

Paideia supports the health of our whole community. From fitness classes for staff to using ecofriendly cleaning supplies, Paideians engage in all kinds of wellness efforts. After significantly reducing idling at carpool, Paideia was designated a Clean Air School. Healthy vending machines and farm-grown vegetables at school food sales offer



students healthy food choices. Science classes explore nutrition, with parents sharing their culture's recipes using produce from our school farm. Physical education classes, a 'no-cut' sports policy (any child who wants to play a sport can), and extended outdoor recess help our children develop active lifestyles. Flu shots, CPR and First Aid classes are all offered on campus.

Paideia intentionally incorporates sustainability concepts throughout the curriculum. We have had particular success in building a thriving urban agriculture program, which involves students in physical activities, engagement with the natural world and inquiry-based exploration of our green spaces using the scientific method. Our full-time Urban Agriculture Coordinator facilitates integrating the farm experience into the curriculum. Teachers use our farms, forest, and creek areas to teach ecology, biodiversity, and water quality. Elementary students measure, graph, and evaluate waste and consumption; learn about water cycles, from rivers and oceans through how water treatment plants function; and analyze oil spills and their effects. Junior High students take part in a year-long science and social studies exploration of food, from nutrition through sustainability and food security. High School students may study environmental science, as well as green home design, ecology, and even a course in primitive living. An added benefit of our urban agriculture program is how it develops our students' sense of social responsibility. Students deliver fresh grown produce to local soup kitchens and work with local schools to help build gardens, even offering composting classes for other schools. They take on leadership roles and explore career opportunities within the field of sustainability. The deep impact of these lessons on our students can be seen in the enthusiasm they show in the myriad sustainable activities on campus: Brownies for Batteries, Reuse-A-Shoe, Creek Clean-ups, and so many more.

At Paideia, our commitment to sustainability is infused in all we do, from curriculum to construction to building community. We are proud that our values can be seen throughout our campus in the structures and land use, but mostly in the students who will shape the future with their passion for caring for our world.

School Contact Information

School Name: **Paideia School**

Street Address: **1509 South Ponce de Leon Avenue**

City: **Atlanta** State: **GA** Zip: **30307**

Website: **<http://www.paideiaschool.org>**

Facebook page: **<https://www.facebook.com/PaideiaSchool/>**

Principal Name: **Paul Bianchi**

Principal Email Address: **bianchi.paul@paideiaschool.org** Phone Number: **404-377-3491, ext. 308**

Lead Applicant Name (if different): **Laura Hardy**

Lead Applicant Email: hardy.laura@paideiaschool.org Phone Number: **404-270-2360**

Level <input type="checkbox"/> Early Learning Center <input checked="" type="checkbox"/> Elementary (PK - 5 or 6) <input type="checkbox"/> K - 8 <input checked="" type="checkbox"/> Middle (6 - 8 or 9) <input checked="" type="checkbox"/> High (9 or 10 - 12)	School Type <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private/Independent <input type="checkbox"/> Charter <input type="checkbox"/> Magnet	How would you describe your school? <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural	District Name _____ Is your school in one of the largest 50 districts in the nation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Total Enrolled: <u>1000</u>
Does your school serve 40% or more students from disadvantaged households? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	% receiving FRPL _____ % limited English proficient _____ Other measures _____	Graduation rate: <u>100%</u> Attendance rate: <u>100%</u>	

1. Is your school participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?

Yes No Program(s) and level(s) achieved: Paideia's farms and gardens are Certified Naturally Grown, a peer-review certification for small farms producing food for their local communities using sustainable agricultural methods and without the use of synthetic chemicals or GMOs. Our school farms and gardens are certified pollinator habitats, through Monarchs Across Georgia, which provide butterflies and other pollinators with food, water, shelter, and places reproduce. Our chicken coop is Animal Welfare Approved, which is a certification for farm animals raised to the highest animal welfare and environmental standards.

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

Yes No Award(s) and year(s) 2011 - Clean Air Campaign's Clean Air School designation 2010 - LEED Gold Level for High School Building 2009 - Metropolitan Atlanta Community Foundation Grants to Green Award 2007 – LEED Silver Level for Junior High Building Commendations and awards from Green Schools Alliance (Green Cup Challenge winner), Georgia Recycling Coalition, U.S. Green Building Council, Atlanta Urban Design Commission and more. We have received additional grants from Captain Planet Foundation, Ray Anderson Foundation, and Monarchs Across Georgia.

Pillar I: Reduced Environmental Impact and Costs

Energy

1. Can your school demonstrate a reduction in Greenhouse Gas emissions?

Yes No Percentage reduction: **Approximately a 10% reduction.** Over (m/yy - m/yy): **01/09-01/15**

Initial GHG emissions rate (MT eCO2/person): **0.006 MT3CO2/person/day**

Final GHG emissions rate (MT eCO₂/person): **0.005 MT3CO₂/person/day**

Offsets: **NA**

How did you calculate the reduction? This calculation is based on power bills from January each year, 2009-11 and 2012-15. We have averaged our January usage in kWh, divided by usage days, and divided that by enrollment for the appropriate time period and converted kWh to MT3CO₂. This compares the time frame prior to the most recent major renovation of a large campus building to current usage. Of course prior to this 'baseline' we did have two LEED buildings built, which had dramatically improved our environmental impact already. As an example of our continued work to improve, our school had an assessment of our energy usage with key recommendations for minimizing impact, provided by Southface Energy Institute and Grants to Green. We have implemented energy saving measures throughout campus. However, due to our changing size and population and constant efforts to improve, it is challenging to even identify a 'before and after' period on which to base measures. Our power bills alone cannot illustrate our true reduced impact on the earth, as those numbers cannot show the shift in behaviors and patterns of the community. Nor can it show the increased usability. As we are able to build efficiently here on campus, we increase our onsite power usage but hugely decrease the fossil fuel usage and emissions from transporting students to rented properties all around the city. Additionally, we can build our properties to a higher standard of efficiency and sustainability than can be found in these distant off-campus locations. In this way we can provide more comprehensive functionality for a far lower per use impact on the environment.

2. Do you track resource use in EPA ENERGY STAR Portfolio Manager? () Yes (●) No

3. Has your school reduced its total non-transportation energy use from an initial baseline? () Yes (●) No

Current energy usage (kBtu/student/year): Approximately 26.366 kBtu/student/day averaged for January 2012-15. This cannot be extrapolated to a per year usage because it is solely comparing January usage year-to-year. Approximately a 10% reduction.

Percentage reduction: **10%** over (m/yy - mm/yy): **Comparing 2009-11 to 2012-15**

This calculation is based on power bills from January each year, 2009-11 and 2012-15. We have averaged our January usage in kWh, divided by usage days, and divided that by enrollment for the appropriate time period and converted kWh to kBtu/student/day. This compares the time frame prior to the most recent major renovation of a large campus building to recent usage. Of course prior to this 'baseline' we did have two LEED buildings built, which had dramatically improved our environmental impact already. As an example of our continued work to improve, our school had an assessment of our energy usage with key recommendations for minimizing impact, provided by Southface Energy Institute and Grants to Green. We have implemented energy saving measures throughout campus. However, due to our changing size and population and constant efforts to improve, it is challenging to even identify a 'before and after' period on which to base measures. Our power bills alone cannot illustrate our true reduced impact on the earth, as those numbers cannot show the shift in behaviors and patterns of the community. Nor can it show the increased usability. As we are able to build efficiently here on campus, we increase our onsite power usage but hugely decrease the fossil fuel usage and emissions from transporting students to rented properties all around the city. Additionally, we can build our properties to a higher standard of efficiency and sustainability than can be found in these distant off-campus locations. In this way we can provide more comprehensive functionality for a far lower per use impact on the environment.

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

On-site renewable energy generation: **None**

Type **None**

Purchased renewable energy: **NA** Type **NA**



Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program: **No**

5. In what year was your school originally constructed? 1912

What is the total building area of your school? **210,000 sq. ft., comprising 14 buildings**

6. Has your school constructed or renovated building(s) in the past ten years? (●) Yes () No

For new building(s): Percentage building area that meets green building standards: **100% for two buildings**

Certification and year received: **Silver LEED and Gold LEED** Total constructed area: **40,480 sq. ft.**

For renovated building(s): **Percentage of the building area that meets green building standards: 70+% Renovations of existing buildings incorporate green practices such as energy efficient heat and air systems, low VOC paints and adhesives, recycled materials, energy-efficient lighting, controlled lighting and motion detectors, highly efficient or waterless toilets and automated faucets.**

Water and Grounds

7. Can you demonstrate a reduction in your school's total water consumption from an initial baseline? No.

8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate?:100% Types of plants used and location: Southeastern native shrubs such as Leucothoe, Beautyberry, Inkberry, Sweetspire, Joe Pye Weed and Osmanthus and trees such as Willow Oak, Redbud and Sweetbay Magnolia, are planted around our campus green, elementary playground, retention ponds and building foundations.

9. Describe alternate water sources used for irrigation. A ground well, rain barrels, and cisterns are used for all main campus irrigation. We use native plants throughout campus and woodchips and mulch for groundcover, which reduces the need for irrigation.

10. Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces. The school has installed two bioretention ponds to minimize stormwater runoff. We have replaced a concrete sidewalk with pervious asphalt. Southeastern native plants are utilized throughout campus, in addition to wood chips and mulch in more open areas.

11. Our school's drinking water comes from: (●) Municipal water source () Well on school property () Other:

12. Describe how the water source is protected from potential contaminants. Paideia's water fountains have built-in or add-on filtration systems. Each year, the City of Atlanta conducts more than 50,000 tests to screen for more than 150 potential contaminants. The water is analyzed for hundreds of compounds. Atlanta's drinking water has won national awards for its quality, clarity and taste. The Department of Watershed Management must provide well over 750 samples per month to the state of Georgia for analysis of lead and copper, bacteria, turbidity, and 21 other contaminants to assure water quality. (per <https://www.atlantawatershed.org/default/?linkServID=FC24D680-B248-4D2C-B1565DA0FC52C72D&showMeta=2&ext=.pdf>)

13. Describe the program you have in place to control lead in drinking water. As part of the Environmental Science curriculum, water from campus buildings is tested for lead. Students use an exact LEADquick photometer with a 1mg/L resolution.

14. What percentage of the school grounds are devoted to ecologically beneficial uses? Approximately 40%

In and around all classroom buildings, Paideia makes an effort to leave natural space and encourage native plant development. Our school's farms and gardens -totaling approximately 1 acre- are devoted to ecologically beneficial uses: elementary organic vegetable garden and native plant garden, food forest/orchard and farms. We are currently working to restore a 3 acre forest on our school campus to its natural state through the removal of invasive plants, the installation of native plants and erosion control measures. This space will provide outdoor classroom space and infinite opportunities for students and classes to reconnect with the natural world.

Waste

15. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting?

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): **143 CY**

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): **52 CY**

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): **0.60 CY**

Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: **(52.6/195.6)100=26.89**

Monthly waste generated per person = $(A/\text{number of students and staff})$: **143/1200=.119 CY/Person**

16. What percentage of your school's total office/classroom paper content is post-consumer material, fiber from forests certified as responsibly managed and/or chlorine-free? 95% At Paideia paper usage is minimized, particularly in the Junior High and High School where every child uses an iPad for notes, assignments, and communication with faculty. When necessary, we choose paper that is designated as part of the Sustainable Forestry Initiative or recycled paper.

17. List the types and amounts of hazardous waste generated at your school:

Flammable liquids	Corrosive liquids	Toxics	Mercury Fluorescent Light Bulbs	Other:
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How is this measured? We do not track the number of bulbs sent to recycling.

How is hazardous waste disposal tracked? Used fluorescent bulbs are boxed and deposited monthly at a certified recycling facility.

Describe other measures taken to reduce solid waste and eliminate hazardous waste. Our lunch program, which is provided by outside vendors, requires that vendors package food in recyclable containers. Old electronics are given to a certified recycling company. Old equipment and furniture is donated to schools, Habitat for Humanity, Lifecycle Building Center and other non-profits. One of our most impressive efforts is our Zero-Waste Thanksgiving Feast, in which we serve 1000 people a Thanksgiving meal and produce only one bag of solid waste; everything left is compostable or reusable.

18. Which green cleaning custodial standard is used? Green Seal Certified What percentage of all products is certified? **95%**

What specific third party certified green cleaning product standard does your school use? **Green Seal**

Alternative Transportation

19. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses) 11% Walk, Bike 5%, Bus 2% use public transportation. We do not use school buses for daily transportation to and from school. 57% Carpool

How is this data calculated? Based on a survey of students, approximately 18% walk, ride a bike, or take public transportation. Additionally, approximately 57% carpool every day to school and another 10% carpool several times a week. Staff is also found riding bikes, walking and carpooling, with a program in place that incentivizes green transportation.

20. Has your school implemented?

designated carpool parking stalls.

Paideia incentivizes carpooling for students by only offering campus parking to those 17 and 18 year olds who carpool with a minimum of two students.

a well-publicized no idling policy that applies to all vehicles (including school buses).

Clean Air School "No Idling" signs are posted along the carpool lanes and parents are reminded via memos throughout the year.

Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows. **Yes**

Safe Pedestrian Routes to school or Safe Routes to School **Yes**

Describe activities in your safe routes program: The Paideia community is currently working to improve the safety of the various walking routes to school by collaborating with Georgia Department of Transportation.

21. Describe how your school transportation use is efficient and has reduced its environmental impact. As part of a 2011/2012 Get There Green program with the Clean Air Campaign, we conducted an incentive program to promote walking to campus and carpooling. Students from the "Green Team" Environmental Club provided breakfast to students who used alternative transportation methods. In addition, club members created a map to assist students seeking carpool partners. Staff participates in an incentive program for carpooling, walking and biking to school as well. The school owns and maintains buses to reduce the number of cars transporting students to practices and events held off campus.

22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. Our school partners with local restaurants and a soup kitchen to divert and capture their organic waste stream on a weekly basis and compost it at our school farm in order to produce a soil amendment for our farms and gardens. On campus, we have a composting program where organic waste is collected from bins in every classroom and the faculty lounge, as well as public areas, for processing at the composting center. This program is managed by high school interns during the school year. Phase 1 of our forest restoration effort was the creation of a 'Conservation grazing for land stewardship project' where we used controlled grazing with ruminants as an alternative to herbicides and heavy machinery for the control of invasive plant species on our school property. Visiting and observing the sheep and understanding their purpose was integrated into science curriculum at all age levels.

Paideia supports and partners with local park conservancies (such as the Olmsted Linear Park Alliance, Candler Park Conservancy, and Trees Atlanta) to ensure that not only our own property but also public green space is protected and nurtured. Additionally, our Student Green Team works with the Alliance for Climate Education program to reduce greenhouse gas emissions at school.

Pillar 2: Improve the health and wellness of students and staff

Environmental Health

1. Describe your school's Integrated Pest Management efforts, including IPM/green certifications earned, routine inspections, pest identification, monitoring, record-keeping, etc.:

Paideia's pesticide use is negligible, due to the fact that we have had a 'pesticide protocol' in place for over a decade. Developed with Emory's Chair of Environmental and Occupational Health, this protocol defines how we handle prevention and treatment, always choosing the least toxic option first. We make every effort to use non chemical/nonpesticide solutions and we choose the response that has the least negative impact on the community and environment. Pests that can be captured are relocated to forests. Other efforts to minimize insecticides, herbicides, and fungicides include natural pest control for our farms and gardens through the installation of native plants and bat boxes to attract beneficial insects, birds and bats that act as natural pest predators. Additionally, our Conservation Grazing Project for removal of invasive plants (ivy, wisteria, and privet) in a sensitive ecosystem (riparian corridor) reduced the need for herbicides.

2. Which of the following practices does your school employ to minimize exposure to hazardous contaminants? Provide specific examples of actions taken for each checked practice.

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 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. **We have not assessed all of the spaces on campus, but it is something we will be addressing.**

Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. All contaminants were removed many years ago and new materials installed.

4. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. Paideia has made a conscious and concerted effort to minimize hazardous chemicals in school, particularly in cleaning and maintenance. We seek to protect students, staff who might use chemicals, and our environment from chemical exposure. Across campus we use the Green Seal as a standard. In our LEED certified buildings, we employ a cleaning company that uses only EcoLab eco-friendly products. In non-LEED buildings we choose products that are non-toxic, dye-free and fragrance-free for the vast majority of applications. We also choose zinc-free options for floor treatment. We choose to order from suppliers with expertise in green cleaning. All chemicals are kept in locked storage with access limited to approved personnel.

5. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. Paideia discourages idling, including via “No Idling” signs, prohibits smoking, has a responsive maintenance crew that quickly addresses moisture issues, and keeps carpet away from water sources. HVAC filters are changed on a regular, scheduled basis. Working with researchers at the Rollins School of Public Health at Emory, advanced testing equipment recorded particulate and ozone levels across campus at different times of the day in 2014. A Paideia student interned with researchers investigating how air quality affects the health of students exercising outdoors. A group of Paideia students participated as test subjects to collect data on variety of physiological parameters.

6. 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. Leaks and mold are addressed promptly and thoroughly. We have dehumidifiers accessible on site when needed.

7. Our school has installed local exhaust systems for major airborne contaminant sources. (●)Yes () No

8. 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. All units are inspected at the time of regularly scheduled or necessary filter changes. During filter changes belts are inspected as well.

9. 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. Paideia complies with all ASHRAE standards and regulations and ensures that renovations address air quality needs.

10. 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. Paideia has a history of being proactive in addressing environmental issues and has faculty, board, student and parent teams that are constantly thinking through how we can improve our environment for our own health, while maintaining our focus on sustainability. In the Fall of 2015, Paideia had a comprehensive inventory and assessment of all chemicals and cleaners used on campus. Clear and consistent labeling was implemented throughout campus. Signs with pictograms for interpretation were posted in all locations containing chemicals. Maintenance crew is trained in the impact of the chemicals they might handle. Chemistry and science teachers are well trained in best practices at protecting indoor air quality, to the extent that some exciting science experiments even take place outdoors.

Nutrition and Fitness

11. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships.

Our school currently has 3 growing sites totaling approximately 1 acre of land all dedicated for student production of organically grown fruit and vegetables and sustainably raised poultry for eggs and meat production. Our Sustainable Agriculture Program produces approximately 2000 pounds of food each year for local soup kitchens and food pantries, as well as for school salads and other lunch time, seasonally featured items, our seasonal school farmer’s market, cooking classes, school events (Thanksgiving meal), seasonal crop festivals (sweet potato festival, garlic festival…) and classroom science projects. As part of our Sustainable Agriculture program, students across all age groups participate in various activities at our farms and gardens on a weekly basis.

This may include activities such as digging, planting, harvesting, composting and mulching pathways. This increases the time outside and amount of physical activity that our students engage in beyond our required PE classes. Paideia offers a wide variety of supports for community health and fitness. Fitness classes are offered on campus for students, staff and parents. We have parent walking groups as well. A course in Making Healthy Life Decisions is required, as are a variety of assemblies addressing health issues, from stress to sleep to nutrition. Counselors work individually with students who are struggling. Students may participate in a Peer Leadership program, and high schoolers act as mentors in a program for junior high students. There is a concerted effort to limit younger students exposure to sugar and to have nutritious offerings at school food sales. Yoga and mindfulness practices are incorporated in classrooms at all age levels.

- [•] Our school participates in a Farm to School program to use local, fresh food. **Yes**
- [•] Our school has an on-site food garden. **Yes**
- [•] Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. **Yes**
- [•] Our students spent at least 120 minutes per week over the past year in school supervised physical education. **Yes**

12. Describe the type of outdoor education, exercise and recreation available. In addition to our physical education program, we ask junior high students to play a sport each year. The emphasis is on participating and learning the fundamentals of a sport. We have a firm no-cut policy. Everyone who tries out will get on a team, practice, and play. Students also have the option of participating in structured, adult-organized play outdoors daily at recess. Extensive sport offerings include: soccer, baseball, softball, volleyball, ultimate frisbee, cross country, tennis, track, swimming, yoga, weight-lifting, and golf. Further outdoor activity occurs through our agriculture program. Students participate in all aspects of farm and garden work through scheduled class time, the after school elementary and high school urban agriculture clubs, farming internships, and our birding clubs, as well as participating in the ongoing habitat restoration of a 3 acre urban green space on our school property (invasive plant removal and trash removal). Elementary students get 30 minutes of outdoor unstructured recess daily in addition to Physical Education. They also get at least one, and often two, "fresh air breaks" of ten minutes each on a daily basis.

13. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. We use our Sustainable Agriculture program as an educational platform to teach our students the connections between sustainable farming practices, land stewardship and growing and eating healthy food. We partner with local organizations (food pantries, soup kitchens, transitional housing facility) who help us distribute our produce to those in our immediate community who do not have access to healthy food. In so doing, we raise student awareness about the importance and benefits of eating healthy food and the positive impact that good food choices have on our health. We have weekly parent work days at the school farms and gardens, staff and faculty yoga and exercise classes and parent cooking classes that focus on healthy school lunches and cooking family meals using healthy ingredients- all part of a school-wide wellness push. We have team building activities for sports teams at our school farm where sports teams participate in a planned physical activity that combines the elements of teamwork and farm work.

Coordinated School Health, Mental Health, School Climate, and Safety

14. **Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues?** (●) Yes

If yes, describe the health-related initiatives or approaches used by the school:

Our nurses work with the grade level chairs and administration to assess any health concerns or current issues on campus or in the community. We offer school community flu shot clinic each year. We implemented a school-wide handwashing initiative, supported with signs and posters in all classrooms and restrooms and have provided handsanitizer and disinfecting wipes in classrooms and public. We have also modified lunch offerings, snacks and classroom treats to reflect healthier food options. Physical exercise is a planned part of all students' curriculum.

15. **Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety?** (●) Yes () No

If yes, describe these partnerships:

Paideia works with the Children's Healthcare Of Atlanta School Nurse Coordinator, as well as the Georgia School Nurses Association and the Atlanta Area Independent School Nurses Association. We use the CDC as a regular resource for information as well as resource materials. Additionally, Paideia is currently participating in a health related project with Emory University's Goizueta Business School. Through their Catalyzing Social Impacts class, business school students are working with Paideia to investigate options for sourcing locally grown and sustainably produced food for our school lunches.

Does your school have a school nurse and/or a school-based health center? (●) Yes () No

16. **Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):** Paideia has 3 counselors dedicated to working with students who are struggling, whether with academic or emotional challenges. These counselors helps students with issues such as romantic breakups, school stress, divorce, difficulties at home, depression, anxiety, fielding concerns about eating issues, drinking/drugs, suicidal ideation, cutting, deaths in families. Ninth graders participate in a course called Making Healthy Life Decisions, which covers a wide range of topics, including brain health, stress, alcohol and drugs, nutrition, and sexuality. Courses are also offered in meditation, mindfulness, and women's health. We have a peer leadership program, as well as a mentorship program in which high school provide guidance to junior high students. The school often has assemblies addressing health and wellness topics as well. For instance, last year we had a sleep expert address our high school student body on the necessity and benefits of sleep. In addition to our anti-bullying policy, the Elementary library curriculum includes an extensive series of lessons on cyber safety and cyber ethics with an emphasis on inculcating kind and empathetic behavior when texting and using other social media.

Pillar 3: Effective Environmental and Sustainability Education

1. **Which practices does your school employ to help ensure effective environmental and sustainability education? 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 requirement. Commitment to the environment is a core part of Paideia's Framework of Values: the school encourages students to take responsibility for the environment and for advocating preservation and protection of the natural world. Paideia strives to teach students that we must meet the needs of the current generation without compromising the needs of future generations. Junior high students are required to



participate in a year-long program exploring food issues, addressing everything from nutrition to sustainability. At least half of all seniors take our Humans and the Environment environmental science course. Students at the junior high and high school level participate in our sustainable agriculture program through weekly service learning projects at the Paideia farms or nearby farms and community gardens. There are classes focusing on different areas of sustainable agriculture including aquaponics, animal husbandry, organic farming and composting. We have urban agriculture clubs, student internships and independent study opportunities. This year we have added a 3 part module on the Basics of Sustainable Agriculture that focuses on real world examples and features guest farmers, chefs and scientists who work in this area.

[•] Environmental and sustainability concepts are integrated throughout the curriculum. Our Sustainable Agriculture program is closely integrated with the elementary science curriculum. All elementary science classes participate in discussions and lessons that may touch on healthy soils, composting, the carbon cycle, plant reproduction, the Georgia planting calendar, sustainable vegetable and livestock production and food justice. Practical applications and hands-on work in the gardens and farms, as well as our relationship with community organizations that focus on food security, reinforce these classroom discussions and provide real world experiences for students to apply what they have learned. Our goal is to create a context where students see the connection between care for the planet, care for themselves and care for others. Paideia encourages teachers to incorporate sustainability into the curriculum and has awarded grants for a variety of projects proposed by faculty, including the development of a junior high curriculum on food security and food safety, the creation of a permaculture garden for an AP environmental class, and a study of aquaponics, which integrates systems of agriculture and aquaculture. The urban agriculture coordinator works with all elementary and several junior high and high school classes in year-round gardening; preparing soil, sowing, transplanting, tending and harvesting as well as raising chickens and keeping bees. The coordinator also oversees the summer agricultural intern program. Field trips offer opportunities to observe scientific events or phenomena first hand. Some of the middle and upper elementary classrooms plan annual field trips to overnight destinations, such as Cumberland Island or the Georgia mountains, in conjunction with their study of science. Each unit is geared to the age level of the students, so that if students learn about trees in an early elementary classroom and again in an upper elementary classroom, each study will be a very different experience. Science teachers utilize the Paideia forest to teach water quality, biodiversity, ecology, and forest management. Students participate in a wide variety of elective classes including green home design, ecology, primitive living, and continued work in environmental science. Students show their enthusiasm for these concepts by participation in the Student Green Team, which is supported by their cohorts on the Parent Green Team. Members of our High School Green Team started an Elementary Environmental Club as well.

[•] Environmental and sustainability concepts are integrated into assessments.

As these concepts are infused throughout our curriculum, they are assessed in the same way as all other concepts. In particular, students study and show understanding of developmentally appropriate content, such as:

K-1: water cycle, rivers and oceans, conservation activities, rainforests, native forest studies

1-2: Georgia watersheds and rivers; archaeology: old garbage and new garbage, how cultures get rid of what they don't want and how to reduce our own waste; farms and organic farming.



2-3: Planting trees, forestry management; water and water cycles, reducing consumption and how treatment plants work, climate change and our carbon footprint.

3-4 Using recycled materials to construct a lunar module model with explanation of what sustains life on earth.

4-5: Collecting, weighing, measuring, graphing and evaluating class-generated garbage.

5-6: Oil spills and their effects.

7-8: Maintain the native plant garden that students designed and installed, sustainable agriculture, food diversity and food security issues. Built worm bins (vermiculture) to produce garden compost.

8th: the Atlanta Beltline project and regional transportation issues; effects of cleaning products and the use of green cleaning agents.

AP Environmental class: Local sustainability issues, including water quality monitoring of Lullwater Creek. Biology: pollution issues and ecosystems; plant growth and nutrient requirements in hydroponic growing systems; pollinators, including hands-on experience working with honey bees and hive installation.

Green Home Design Course: Low-impact sustainable housing.

Permaculture Design Course: Permanent and sustainable agriculture.

Nicaragua Trip: Analyzes business models that promote social change and environmental sustainability in a developing country.

[●] Students evidence high levels of proficiency in these assessments.

Students are not assessed on sustainability independent of other concepts.

[●] Professional development in environmental and sustainability education are provided to all teachers. Our school provides assistance and funding to teachers so that they can attend conferences and training sessions and take advantage of opportunities for development in the areas of environmental education and sustainability. Some examples of programs our teachers participate in are the annual conference of the Environmental Education Alliance of Georgia, the Sustainable Agriculture Working Group conference and the Georgia Organics conference. Paideia also has a full-time teaching staff member, our Urban Agricultural Specialist; clear evidence of the school's commitment to sustainability in the curriculum for students and for staff development.

2. For schools serving grades 9-12, provide: Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: In 2015, 35% of graduating seniors had taken Humans and the Environment (equivalent to AP environmental science) and this year 50% of seniors are enrolled in Humans and the Environment.

Percentage scoring a 3 or higher: **N/A**

3. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? Students of all ages explore sustainability by engaging in the scientific method in our classrooms, libraries and green spaces. Elementary students study pollinators and their impacts, the water cycle, rivers and oceans, native forests, Georgia watersheds and river, how treatment plants work, reducing consumption, waste reduction, farms and organic farming, climate change and our carbon footprint. Students can be seen collecting, weighing, measuring, graphing and evaluating class-generated garbage. They even study oil spills and their effects.

In the high school, Biology students do research on predation and food webs. Students in Humans and the Environment study forest dynamics, test water quality, calculate biodiversity estimates, study invasive species, calculate population sizes, and conduct independent student research. Geology students collect rock samples and study geologic formations.

We received a science and technology grant to fund our aquaponics project. Students will learn about aquaculture and hydroponic systems and how to create technology to monitor these sustainable growing systems in order to produce food for the community in an urban environment. In Environmental Science students must design and build a stove that could be used in the slums of Nairobi. The stoves are graded on efficiency, emissions, cost, and ease of use. Students also design, create, and test efficiency of various wind turbine designs, requiring the use of geometry and physics. As part of the Environmental Science curriculum, water from campus buildings is tested for lead. Students use an exact LEADquick photometer with a 1mg/L resolution.

4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? In addition to participation and internships in our sustainable agriculture program, our Green Home design course requires students to design and build models of homes incorporating various green technologies. The final designs have been evaluated by professionals in the industry. Students in Humans and the Environment toured a “plastic to fuel” research plant and talked with entrepreneurs in the field of energy production. Students also toured an innovative black water treatment facility at Emory University.

5. Describe students’ civic/community engagement projects integrating environment and sustainability topics. Paideia students are involved in sharing our environmental mission with the larger community through events such as our Reuse-A-Shoe drive, in which students collect, clean and share shoes with those in need. Paideia hosts speakers and presentations on environmental topics that are open to our wider community. The Student Green Team leads recycling drives for bulbs, batteries and electronics. They have also led our participation in the Green Cup Challenge, as well as developed a website sharing their research, tips and projects in sustainability. In addition to managing our recycling program, these motivated students have sponsored a Walk/Bike/Scoot-to-School Day as well as a fashion show of eco-friendly student-designed garments. An extension of our sustainable agriculture program is community and civic engagement. Students grow and deliver thousands of pounds of organically grown vegetables to local soup kitchens and food pantries, install edible gardens in schools and community gardens in less resourced neighborhoods and work with both non-profit and for-profit social enterprises working in the area of food justice. Some of our students have written articles for local publications on topics like the importance of pollinators, created informational pamphlets for neighborhood distribution and organized panel discussions on pesticide use and potential effects on bees. We also train students to become certifiers for the national Certified Naturally Grown program in order to assist local farms to reach their sustainable farming goals.

6. Describe students’ meaningful outdoor learning experiences at every grade level. All of our students have myriad meaningful outdoor learning experiences, particularly through our Sustainable Agriculture program. In addition, we have created multiple opportunities for outdoor experiences. One recent project for all ages focused on revitalizing a green space directly adjacent to our campus. As part of this project, students learned first-hand about how to deploy sheep to remove invasive plants. They also identified and labeled invasive plants to be removed, and native plants to be protected. They identified various tree



species and surrounding plant guilds; identified erosion problems; and monitored contributors to water quality in the creek that runs through the property. As we continue to develop this “urban oasis”, students will participate in citizen science projects (such as bird species identification), and endangered native plant installations. They will also have opportunities to measure the positive impacts that these projects have on their immediate environment, relative to base lines developed at the start of this project. In the high school, students frequently use the Paideia forest, Lullwater park, and Candler Park for outdoor labs. Biology students walk to the forest to do research on predation and food webs. Students in Humans and the Environment use these areas to: study forest dynamics, test water quality, calculate biodiversity estimates, study invasive species, calculate population sizes, and conduct independent student research. Geology students collect rock samples and study geologic formations.

7. Describe how outdoor learning is used to teach an array of subjects in context, engage the broader community, and develop civic skills. Students develop a sense of their role and responsibility in the world as they engage in the aforementioned agricultural and science programs. They develop civic skills both through learning about needs and practices in our curricula and through partnering with civic-minded organizations in our community, such as the Open Door Community, Atlanta Community Food Bank, Clifton Ministries, Love is Love Farm, Global Growers, and countless others. Students demonstrate their commitment to the community by independently advocating for and organizing events such as Brownies for Batteries, a drive to encourage battery recycling. The school also has hosted community events to collect hazardous or difficult to recycle materials, donated large reusable items to organizations like Habitat for Humanity's REStore, and worked with Charm (Atlanta's Center for Hard to Recycle Materials) to keep larger items (like old office furniture) from heading to the landfill. Our annual Re-use a Shoe drive engages children from age 5-12, who collect old shoes and then gather to scrub them clean, preparing them for the next wearer.

8. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. In addition to working with the Clean Air Campaign to be designated a Clean Air School, our student Green Team works with the Alliance for Climate Education program to reduce CO2 emissions at school. Our high school Birding Club partners with the Atlanta Audubon Society to build and monitor nesting boxes in our forest. We have also hosted an Atlanta Urban Development Institute, inviting students from area schools to spend a few weeks meeting with high-level city officials to look at how Atlanta works to maintain a sustainable lifestyle for our changing population. Paideia partnered with a Pre-K Montessori school in a less resourced community in order to help them create an edible schoolyard garden. For the last 2 years, Paideia junior high students have installed both annual and perennial vegetables, native plants and fruit trees so that students can make connections between the natural world, sustainable food production and eating healthier foods. We have brought student groups to our school farms in order to provide opportunities for other school communities to benefit from our outdoor classroom spaces. We offer composting classes for local schools and the community. Additionally, Paideia has worked with Stewart Camp, Clarkston Community Center, and Clifton Ministries installing gardens.

The Elementary Library has several dedicated parent volunteers who take surplus materials to two underserved schools, Whitefoord and the International Community School. Rather than discarding a large collection of cassette tapes, videotapes, reference books, print encyclopedias, and used donated books, we delivered them to nearby school libraries who welcomed them. Our elementary students also collected gently used items for children from these schools to choose at a Holiday Gift Market,

allowing them to give gifts to their families. This event culminated in students from three schools sharing gingerbread and playtime on our playground. By participating in these place-based collaborations, we hope to create an awareness in our students about the importance and inter-connectedness of people-care, planet-care and a fair share for all in our community.

9. 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. It is a rare school campus where you see compost bins available at all classroom and public waste stations with students emptying them for use on campus. This is a prime example of how Paideia has succeeded in building in students an intrinsic drive to keep our world beautiful and make a difference around them. Sometimes the best assessment of whether students are absorbing messages about sustainability and their ability to do something productive is measured by their behavior and choices. Paideia students are often the ones questioning and motivating staff and faculty to think in new ways about how we can further the mission of caring for our world. In the summers, you can find students sharpening their STEM skills and keeping their minds and bodies healthy in our variety of camp offerings which include: science camp, farming camp, robotics camp, cooking camp, hiking camp, fitness and photography camp, an indoor and outdoor gaming camp (like a p.e. camp). Students find practical applications for our agricultural programs beyond what you might expect. Paideia began a medicinal herb project and donated milky oats and holy basil for use in a free clinic for the homeless. Students also learn how to use these crops in teas and salves. These are just some of the countless ways Paideians integrate their learning and experiences to apply them to solving problems of the community. In addition to all of the aforementioned partnerships, Paideia has partnered with Global Growers, Concrete Jungle, Love is Love Farm, Compost Wheels and the Atlanta Veteran's Farmers Market, among so many more through the years. It is through these connections in the community and real-life experiences that our students begin to see not only their path through the world, but how they can contribute to a greener future and have the joy of knowing that they can make a difference.



Students prepare greens for our farm-to-school lunch offerings, as well as for donation to local food pantries. In preparing to share our harvest for consumption, students learn the science behind keeping our food clean, safe and healthy.

High School students take on the hard work of composting all the materials from our campus bins and from local restaurants, no matter the weather!



High School students practice the conservation biology method of population estimation using quadrats.

Elementary students analyze types of pollinators, their ranges, and how we can best support their survival.





Hidden deep beneath our Campus Green is a geothermal heating system, supplying heat to our LEED certified Junior High Building while also providing dedicated space for outdoor activity, a treasure in an urban setting.