



2014-2015 School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

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

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

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

Charter Title I Magnet Private Independent

Name of Principal: Mr. David W. Jones

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

Official School Name: Dr. M.H. Mason Jr. Elementary School

(As it should appear on an award)

Official School Name Mailing Address: 3030 Buntun Road, Duluth, GA 30096

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

County: Gwinnett School Code Number *: 0298

Telephone: 770-232-3370 Fax: 770-232-3372

Web site/URL: http://www.gwinnett.k12.ga.us/schooldom/MasonES/gcps-schooltemplate.nsf/Pages/Homepage

E-mail: David W Jones@gwinnett.k12.ga.us

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

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

I have reviewed the information in tl

David W. Jones (Principal's Signature)

Date: 1-20-15

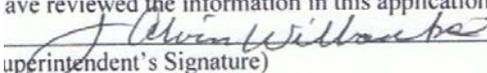
(Principal's Signature)



Name of Superintendent: **Mr. J. Alvin Wilbanks**
(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: **Gwinnett County Public Schools**

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

I have reviewed the information in this application

(Superintendent's Signature)

Date: **1-20-15**

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. Robert 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.


(Nominating Authority's Signature)

Date: **1-27-15**

(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

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

SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

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

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or



retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

Dr. M.H. Mason Jr. Elementary School (Mason) looks beyond today's classroom to provide learning environments for tomorrow's students. We employ best practices in operations management, ensuring that buildings, grounds, and athletic facilities are safe, energy-efficient, and well maintained. We follow district policies for integrated pest management, hazardous waste, chemical usage, and ventilation systems.

Mason is ENERGYSTAR certified with a current score of 94. Our energy efficient upgrades include lighting retrofits in classrooms, occupancy sensors, automated energy management systems, and variable frequency drives. Students and teachers practice energy conservation by turning off lights and following our school's "unplug" protocol prior to leaving for extended breaks to prevent phantom power pulls.

For optimal teaching and learning to occur, Mason embraces the health and wellness of our students and staff. Approximately 80% of our fresh produce comes from local farmers. Nutrition staff members visit classrooms to offer learning opportunities for students. We strive to create a healthy physical environment by ensuring our students spend one third of their specials' time dedicated to physical education. Utilizing the Fitness Gram program, students are assessed annually for flexibility strength, and endurance. Ninety six (96%) of our students are helping to improve air quality by riding the bus, riding a bike, or walking to school. Our school participates in the No Idling program which is designed to reduce idling rates in our bus and car rider lines. Signage and educational materials alert parents that our school is a No Idling School, and thus bus engines and car engines are turned off while not in motion.

Our environmental stewardship extends beyond the building and into our extensive outdoor learning areas which have been funded through local grants. Over 30% of Mason's grounds are devoted to outdoor learning areas, which include trails, pollinator gardens, vegetable gardens, and native plantings maintained by our students. One hundred percent of Mason's landscaping is considered water-efficient and regionally appropriate. Plantings around our playgrounds are watered by storm water which is pumped from a detention pond on our school's property. Students engaged in Problem Based/STEM learning that resulted in the design & installation of terraced steps leading to our outdoor classroom. The terraced steps not only provide easier access to the outdoor classroom, but also decreased erosion and storm water runoff.

In partnership with nonprofits Gwinnett Clean & Beautiful (GCB) and the Clean Air Campaign, our school has a multi-disciplinary team whose focus is waste reduction& recycling, air quality, energy conservation, water conservation, and greenspace preservation. Annually, over 50,000 lbs. of materials is recycled and diverted from our community's landfills. To extend students' learning beyond the brick and mortar walls, our school participates in community service events such as Great Days of Service and America



Recycles Day.

Our school incorporates environmental education K-5 that is aligned to the Common Core. We are pleased to report that over 90% of our students performed in “meets or exceeds” standards in science. Mason is in its second year of completing Georgia STEM certification process. All teachers receive monthly staff development in PBL (Project Based Learning) and STEM (Science, Technology, Engineering, and Math.) Mason students are immersed in PBL/STEM and engaged in real-world, STEM activities that foster collaboration, critical and creative thinking, and problem solving in addressing environmental issues. Some examples of PBL/STEM learning include: 2nd grade students designed and built solar ovens to cook s’mores while learning about alternative energy sources, 3rd grade students acted as engineers to design and build water filtration systems, 5th graders analyzed No Idling data from the car rider line to help reduce idling. Students also created & sold necklaces from reused materials and donated proceeds to Mason’s cancer fundraiser “Relay for Life.”

Mason developed several unique & cutting edge collaborative PBL/STEM programs this year by working with our local high schools. High school students visited Mason to work with our elementary students to design musical instruments from reclaimed items. The physics students were able to connect their curriculum on sound and vibration to our elementary learning objectives. In another unique program, high school students from the Mathematics, Science, and Technology school worked with our elementary students to design and construct electric houses. These events were highlighted and presented to the community during our annual STEM day. Community experts, engineers, and high school robotics students were also on hand to help instruct and inspire our students.

Our environmental efforts at Mason have been years in the making and required dedication and meaningful collaboration between our teachers, students, parents, leaders, and community partners. We “walk the talk” through our PBL/STEM program, extracurricular activities, and a commitment to operate our school to the highest of standards. It is in this way that we model environmental stewardship for our students to provide a sustainable community for our future generations.

Q1: District Contact Information

School Name: Dr. M. H. Mason Elementary School

District Name: Gwinnett County Public Schools

Principal Name: David W. Jones

Address: 3030: Bunten Rd., Duluth, GA, 30096

Lead Applicant Name: David W. Jones

Lead Applicant Email Address: david_w_jones@gwinnett.k12.ga.us

Lead Applicant Phone Number: 770-232-3370

Q2: School Information

How would you describe your school: Suburban

Does your school serve 40% or more students from disadvantage households? Yes

% receiving FRPL: 42%

%limited English proficient 8%

School Type: Public

Level: Elementary

Total Enrolled: 950

Attendance Rate: 97%

Is your school participating in a local, state or national school program which asks you to benchmark progress in some fashion in any or all of the Pillars? Yes. Gwinnett Clean & Beautiful- Green & Healthy Schools-Reaching Higher School - 2008-present, Green & Healthy Schools: Sustaining Excellence in Environmental Education Award-2009-present, Gwinnett Clean & Beautiful/Gwinnett County Public Schools Single Stream Recycling Pilot School-2012-present, Georgia Department of Transportation- Clean Air School Anti-Idling Campaign- Data indicates a consistent reduction in idling since 2009, Technology Association of Georgia- Best STEM Day-2014 Finalist, Monarchs Across Georgia-Pollinator Habitat Certification 2014, Silver medalist in the Georgia Shape Awards

2. Has your school, staff or student body received any awards for facilities, health or environment? Yes, Gwinnett Clean & Beautiful – Green Educators of the Decade, Gwinnett Clean & Beautiful- Green & Healthy Schools-Reaching Higher School (6 years), Green & Healthy Schools-Sustaining Excellence in Environmental Education Award (6 years), Technology Association of Georgia- Best STEM Day-2014 Finalist, Georgia Department of Transportation- Georgia Safe Routes to School-The Golden Shoe Award, Certifications: Monarchs Across Georgia-Pollinator Habitat Certification (2014) .

Pillar I: Reduced Environmental Impact and Costs

Q3: Energy

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

A2. Percentage reduction: 15.5%

A3. Over (m/yy - m/yy): 9/2009-6/2014.

A4. Initial GHG emissions rate (MT eCO₂/person): 750.8 (MT eCO₂)/1425=0.53

A5. Final GHG emissions rate (MT eCO₂/person): 634.5 (MT eCO₂)/1018=0.62, Actual emissions rate have dropped 15.5% for the school since 2009, but when MT eCO₂ is calculated per student, the value is actually increased due to a drop in enrollment in 2014 while square footage use remained constant.

A6. Offsets: EPA ENERGY STAR PORTFOLIO Metrics Comparison Data

A7. How did you calculate the reduction? EPA ENERGY STAR PORTFOLIO Metrics Comparison Data

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

B1. Energy Star Certification: Yes

B2. Year(s) and score(s) received: ENERGY STAR earned in 2010 with a score of 85. 2014 Mason ES ENERGY STAR Score is 94, an increase of 10.6% in four years. The District, including Mason ES, has earned the ENERGY STAR certification by using less energy and generating less greenhouse emissions than districts with similar buildings across the nation.

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

C2. Current energy usage (kBtu/student/year): 0.237

C3. Current energy usage (kBtu/sq. ft./year): 31

C4. Percentage reduction: 16%

C5. Over (m/yy - mm/yy): 6/10-6/14: 37 kBtu to 31 kBtu

C6. How did you document this reduction? Utility manager report and ENERGYSTAR PORTFOLIO

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

D1. On-site renewable energy generation: 0

D2. Type: 0

D3. Purchased renewable energy: 0

D4. Type: 0

D5. Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program:

Energy Star

E1. In what year was your school originally constructed? 1996

E2. What is the total building area of your school? 132,940 SF

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

F2. For new building(s): Percentage building area that meets green building standards: NA

F3. Certification and level: NA

F4. Total constructed area: NA

F5. For renovated building(s): Percentage of the building area that meets green building standards: NA

F6. Certification and level: NA

F7. Total renovated area: NA

Q4: Water and Grounds

A. Describe alternate water sources used for irrigation. The playground plantings are the only irrigated plants on campus. The water used for this irrigation is storm water stored in an over-excavated detention pond, thus not requiring county water. Xeriscape is practiced by the district and Mason ES to restrict the need for irrigation.

B. Describe any efforts to reduce storm water runoff and/or reduce impermeable surfaces. Any storm water runoff is stored in the bottom of the detention pond and then pumped back onto the playground planted areas for irrigation. Multiple outdoor learning areas have been created at Mason ES that include flowers, shrubs, and trees to reduce storm water runoff in addition to their aesthetic, cooling, and educational benefits.

C. Our school's drinking water comes from: Municipal water source

D. Describe how the water source is protected from potential contaminants. Any storm water runoff is stored in the bottom of the detention pond and then pumped back onto the playground planted areas for irrigation. Multiple outdoor learning areas have been created at Mason ES that include flowers, shrubs, and trees to reduce storm water runoff in addition to their aesthetic, cooling, and educational benefits.

E. Describe the program you have in place to control lead in drinking water. We rely on the program currently monitored by Gwinnett County Department of Water Resources.

F. What percentage of the school grounds are devoted to ecologically beneficial uses? Approximately 30% of Mason ES' grounds are devoted to outdoor classrooms and trails, butterfly and other pollinator gardens, plus six large planter boxes that contain native plants and bird feeders that are maintained by our special needs population.

Q5: Waste

A. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A1. Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): Mason's waste is serviced by a compactor and 78.8 tons of waste was disposed for the past year. The compactor was emptied 12 times and has a maximum capacity of 35 cubic yards. It was emptied once per month whether full or not, so actual volume in cubic yards is unknown.

A2. Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): Mason had on average 1 recycling pick up a month which resulted in a total of 39,000 lbs. of collected/recycled materials

A3. 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): Compostable materials are not collected in a dumpster.

A4. Recycling Rate = $((B + C) \div (A + B + C) \times 100)$: 24.7%

A5. Monthly waste generated per person: = 12.3lbs.

B. 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? 30%

C. List the types and amounts of hazardous waste generated at your school: Amounts not quantified but would include paint, batteries, solvents, and medical waste from clinic. Environmental Services ensures that any hazardous waste is disposed of properly according to district policy.

C1. Flammable liquids: 0

C2. Corrosive liquids: 0

C3. Toxics: 0

C4. Mercury: 0

C5. Other: 0

C6 How is this calculated? Amounts not quantified but would include paint, batteries, solvents, and medical waste from clinic. Environmental Services ensures that any hazardous waste is disposed of properly according to district policy.

C7. How is hazardous waste disposal tracked? Environmental Services ensures that any hazardous waste is disposed of properly according to district policy.

D. Which green cleaning custodial standard is used? Gwinnett County Public Schools (GCPS) does not subscribe to a single green cleaning custodial standard at this time. However, the district continually tests “green” cleaning supplies. GCPS does not subscribe to a single green cleaning custodial standard at this time. However, the district continually tests “green” cleaning supplies.

D2. What percentage of all products is certified? Most chemicals used in custodial program have low-zero-hazard ratings. Those projects that use more caustic chemicals are left for summer when fewer staff and students are in the building.

D3. What specific third party certified green cleaning product standard does your school use? All custodial chemicals are specified by GCPS and purchased through the GCPS warehouse, which insures that all chemicals are keeping with district policies and procedures.

E. Describe other measures taken to reduce solid waste and eliminate hazardous waste. Mason embraces the 5 R’s: Reduce, Reuse, Recycle, Resource, and Responsibility! Through the district recycling pilot and creative partnerships, our school is able to significantly reduce solid waste produced. Our students, led by the Green Team, have educated our staff and students to demonstrate responsible environmental stewardship daily. Any chemicals brought into the school must be approved, either through the specific curriculum department for instructional materials such as science, art, etc. and other products through our Environmental Services department. Disposal requirements are considered in that process.

Q6: Alternative Transportation

A. 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)

A1. 96%

A2. How is this data calculated? Student Information System based on current population of 950 students. Approximately 80 cars daily with 2+ students in the car: 8% (40 cars daily with 1 student in the car = 4%) 100 Walkers/bikers = 10% 730 students ride buses = 78%

B. Has your school implemented?

B1. Designated carpool parking stalls. Mason does not have parking stalls, but we have a designated carpool line.

B2. A well-publicized no idling policy that applies to all vehicles (including school buses). Yes, as part of our involvement with the Clean Air Schools Anti-Idling Campaign, we have signage around the campus. We monitor and collect data on idling throughout the school year.

B3. Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows. Yes

B4. Safe Pedestrian Routes to school or Safe Routes to School? Yes

B5. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. Mason ES participates in a Safe Routes to School program that hosts four Walk and Roll events per school year. Each event features a large (3 ft. by 5ft.) sign-in poster with picture, prizes, music, participation stickers, drinks, and snacks. Each event is advertised school-wide.

C. Describe how your school transportation use is efficient and has reduced its environmental impact. 96% of Mason ES students now ride the bus or walk, and the remaining car-riders have resulted in a significant reduction in idling rates, increased awareness of the efficiency of riding the bus, walking, or car-pooling has reduced our transportation environmental impact. Our no idling policy is well publicized and applies to all vehicles, including buses. Teachers/staff are encouraged to carpool when possible.

D. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships. Mason participates in the Clean Air Campaign programs “Pool to School” & “Ride the Bus for Clean Air,” “No-Idling Campaign,” and “Walk and Roll to School.” Mason participates in the Clean Air Campaign's "No Idling Program". This program encourages parent drivers to turn off their engines when dropping off or waiting for students, thus decreasing harmful emissions and creating a healthier school environment. In-ground signage and educational materials are presented to all parents at the beginning of each school year. Several times a year, green club members will "surprise" drivers who are not idling with pencils, pens, notepads, etc. Lessons are also taught from the Clean Air Campaign website to promote awareness of air quality and air pollution.

Pillar 2: Improve the Health and Wellness of Students and Staff

Q7: Environmental Health

A. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: Mason follows the district policy- P.EBBB for Integrated Pest Management with specific focus on identifying root causes of pest problems, and seeks to reduce or eliminate by non-chemical means on a case-by-case basis. For the past 12-month period, Mason only utilized 10 oz. of pesticide, which equates to an annual pesticide use of 0.0011 gallons/student/year.

B. 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 follows district policy P.GAMA-Drug Free Workplace. Illicit drugs and the use of tobacco and alcohol are prohibited on school property or during any school-sponsored activities.

B2. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. Our school has identified and properly removed sources of elemental mercury and prohibits its purchase and use in the school. Under an EPA grant, Mason/district made an effort to collect, remove, and dispose of elemental mercury from our school-including thermometers, barometers, & thermostats. Thermostats were changed as part of the Energy Management System.

B3. Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO): No

B4. Our school does not have any fuel burning combustion appliances: No

B5. Our school has tested all frequently occupied rooms at or below ground level for radon gas and has fixed and retested all rooms with levels that tested at or above 4 pCi/L OR our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L. Our school was built with radon resistant construction features and tested to confirm levels below 4 pCi/L. Results showed that our construction design effectively mitigated any radon that was present. Our campus is constructed on a concrete, nonporous slab that contains a vapor barrier and is placed over a compacted soil base which acts as an additional barrier. Our school also has forced ventilation HVAC system which exhausts air to the outside of the building and replenishes with fresh air.

B6. Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. Unknown. The borders around the Safety Surfacing and the wooden fitness equipment could contain CCA. Mason opened in 1998. CCA was not banned until 2003/04.

C. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure. Mason adheres to district policy P.EBM. Bringing chemical products into our school is prohibited. Curriculum related products used in science or fine arts require approval of curriculum office.

D. Describe actions your school takes to prevent exposure to asthma triggers in and around the school. See previous explanation of policy P.EBM. Mason also strives to make sure electric, not gas powered tools are used on smog-alert days. All rooms, elevators, and stairs are vacuumed daily. Bathrooms/halls are cleaned and sanitized on a regular schedule.

E. 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. Mason uses a work order tracking system for reporting moisture problems (leaks, condensation, and excess humidity.) Insulating techniques, along with EMS are used for HVAC and mechanical system to control condensation and humidity. If mold does occur, custodial staff follow district policy to clean and sanitize affected areas.

F. Our school has installed local exhaust systems for major airborne contaminant sources. Yes, Ion Generators

G. 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 buildings are ventilated to meet ASHRAE standards. Head custodian schedules PMs to maintain optimal performance of equipment. Mason also conducts quarterly filter changes.

H. 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. All Mason's buildings are ventilated to meet ASHRAE standards.

I. 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. To maintain and promote superior air quality, the EMS continuously monitors humidity and CO2 levels. Preventive maintenance on HVAC equipment is tracked via a computerized maintenance management system. HVAC air filters are on a routine schedule for replacement.

Q8: Nutrition and Fitness

A. Which practices does your school employ to promote nutrition, physical activity and overall school health?

A1. Our school participates in the USDA's Healthier US School Challenge. Level and year: No

A2. Our school participates in a Farm to School program to use local, fresh food. Yes

A3. Our school has an on-site food garden. Yes, we have extensive outdoor gardening and do grow some vegetables.

A4. Our school garden supplies food for our students in the cafeteria, a cooking or garden class or to the community. Yes, our school grows vegetables seasonally and students are given the opportunity to taste food from our garden. Some classes have harvested the vegetables to add to salads.

A5. Our students spent at least 120 minutes per week over the past year in school supervised physical education. Yes

A6. At least 50% of our students' annual physical education takes place outdoors. Yes, including teacher directed physical education.

A7. Health measures are integrated into assessments. Yes, Mason's Physical Education teacher conducts physical fitness testing and distributes results to families.

A8. At least 50% of our students have participated in the EPA's Sunwise (or equivalent program). No

A9. Food purchased by our school is certified as "environmentally preferable" Mason adheres to federal nutrition guidelines for school meals, ensuring that meals offered are healthy, well-balanced and provide students the nutrition they need to grow and develop.

A10. Percentage: 100%

B. Describe the type of outdoor education, exercise and recreation available. Physical education classes are held outdoors when weather permits. Teacher directed physical activity is conducted on the playgrounds when possible. Students also enjoy the outdoor learning areas and gardens. Four times a year, students are encouraged to walk or bike to school as part of our Safe Routes to School program.

C. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships. Our school participates in the Walk and Roll programs, the International Walk to School Day and the Georgia Walk to School Day. Mason was a silver medalist in the Georgia Shape Awards. Our physical education department also measures student's physical fitness levels via the Fitnessgram program.

Pillar 3: Effective Environmental and Sustainability Education

Q9. A. 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. Mason ES participates in the Green & Healthy Schools program, a unique partnership between nonprofit Gwinnett Clean & Beautiful and our district, Gwinnett County Public Schools (GCPS.) We have a comprehensive program that incorporates environmental education at each grade level and is aligned to the Common Core. Mason's rigorous curriculum allows for inquiry based learning and also includes the use of models, investigation, and data analysis. Mason employs science, math and technology specialists that provide in-depth exposure to STEM foundations with real world environmental applications.

B. Our school has an environmental or sustainability literacy requirement. Mason ES participates in the Green & Healthy Schools program, a unique partnership between nonprofit Gwinnett Clean & Beautiful and our district, Gwinnett County Public Schools (GCPS.) We have a comprehensive program that incorporates environmental education at each grade level and is aligned to the Common Core. Mason's rigorous curriculum allows for inquiry based learning and also includes the use of models, investigation, and data analysis.

C. Environmental and sustainability concepts are integrated throughout the curriculum. Environmental topics are imbedded in GCPS' Academic Knowledge & Skills. Students read, write, speak, and utilize technology in learning about the environment. Environmental lessons and projects reflect a cross curricular approach in environmental education.

D. Environmental and sustainability concepts are integrated into assessments. At Mason there is an interdisciplinary approach to learning about the environment. Topics are imbedded throughout Gwinnett’s Academic Knowledge & Skills and both qualitative and quantitative assessments include environmental topics. On the science portion of the standardized year-end test, 91% of students performed in the “Meets Standards or Exceeds Standards Range, with 69% exceeding expectations.

E. Students evidence high levels of proficiency in these assessments. On the science portion of the standardized test (CRCT), 91% of Mason students performed in the “Meets Standards” or Exceeds Standard ranges, with 69% “Exceeding” expectations.

F. Professional development in environmental and sustainability education are provided to all teachers. All Mason teachers receive year-round staff development delivered by our teachers on a variety of environmentally-based STEM lessons. Teachers collaborate on teaching and learning and seek innovative ideas and practices in science. A teacher also serves on the Green & Healthy School’s Steering Committee and attends environmental education trainings twice a year. Other members of the environmental team which include parent liaisons also attend the environmental training meetings. The information gleaned at these trainings is then shared with our staff.

Q10: A. For schools serving grades 9-12, provide:

A1. Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: Percentage scoring a 3 or higher: Percentage of last year's eligible graduates who completed the AP Environmental Science course during their high school career: N/A

A2. Percentage scoring a 3 or higher: N/A

B. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge? In addition to information already shared, Mason hosted several STEM opportunities for students. Our curriculum encourages environmental literacy and critical thinking skills at all grade levels in all content areas. We partnered with our cluster high school to host high school students/teachers to collaborate and design model electrical houses and musical instruments. We were able to meet academic standards for both elementary and high school students. Below are two short video clips of Mason’s Physics and Engineering Day, as well as our music/instruments collaboration with Peachtree Ridge High School. <https://www.youtube.com/watch?v=5J8WP975Yio&feature=youtu.be>
https://www.youtube.com/watch?v=GdL_u-o7D-g&feature=youtu.be

C. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? Mason’s math and science specialists provide in-depth exposure and inquiry experiences for every student. Career pathways are embedded into the curriculum and taught via science, math, technology, art, music, health, classroom, and school-wide events such as STEM/Literacy Night, Science & Engineering Fair, and STEM Day. Guest speakers are recruited yearly to share with students their career experiences in the environmental field.

D. Describe students' civic/community engagement projects integrating environment and sustainability topics. All grade levels have completed project-based learning throughout the year. Students created necklaces made from reused items (puzzle pieces, crayons, etc.) and sold them with proceeds going to Relay for Life (Cancer fundraiser.) Student-initiated projects include: collecting books and donating them to "Rainbow Village." Mason's students and staff also participated in several community-based events: Great Days of Service, Earth Day events, and America Recycles Day. Students gained leadership skills and were able to extend their learning beyond the classroom walls.

E. Describe students' meaningful outdoor learning experiences at every grade level. Efforts have included school wide initiatives in which every student, with their teachers participated in PBL learning related to the environment. Kindergarten students measured, designed, and built a butterfly/pollinator garden. Students then raised butterflies and released them into the outdoor classroom. 1st grade-planted and maintained flowers and herbs, 2nd grade-planted shrubs and trees, 4th grade students designed and built birdhouses. 5th grade students researched native plants for the outdoor classroom.

F. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills. All grade levels have completed project-based learning throughout the year. Students created necklaces made from reused items (puzzle pieces, crayons, etc.) and sold them with proceeds going to Relay for Life (Cancer fundraiser.) Student-initiated projects include: collecting books and donating them to "Rainbow Village." Mason's students and staff also participated in several community-based events: Great Days of Service, Earth Day events, and America Recycles Day. Students gained leadership skills and were able to extend their learning beyond the classroom walls. Our outdoor learning area was partially funded by a Lowe's grant.

G. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships. Mason, one of 92 district schools, participates in the Green & Healthy Schools Program, which is a joint venture of Gwinnett County Public Schools & the nonprofit agency, Gwinnett Clean & Beautiful. This program requires planning, executing, and documenting progress in seven "earth friendly" pathways. • Waste Reduction • Education & Stewardship • Water Conservation & Watershed Protection • Air Quality • Energy Conservation • Beautification and Greenspace Preservation • Community Impact GCB continuously collaborates with GCPS teachers to provide engaging hands-on experiences, resources, and events to build awareness of environmental issues facing our region. Our school also participates in the Clean Air Campaign's "No Idling" program. Through educational efforts and outreach to parent drivers, we have been able to consistently reduce our Idling Rate in the carpool line.

Mason's award winning Green & Healthy Schools Program:

<http://link.brightcove.com/services/player/bcpid1525654889001?bckey=AQ~~.AAA5-IfZIE~,YsAbjfjEZqnm81AvVrwWijaa-W0afev&bctid=3530683472001>

H. 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. Mason is in our 2nd year of completing the GA STEM certification process. This includes a school-wide model for STEM certification. Mason students are engaged daily in challenges that apply the engineering design process to environmental issues facing our region. Our curriculum encourages environmental literacy and critical thinking at all grade levels in all content areas. One example of STEM/green technology is our 3rd grade curriculum. Students are challenged to engineer their own water purification system that could be used around the world. Students complete a budget sheet and design a water filtration system for 3rd world countries that lack access to drinkable water. Students build and test their water system until they are able to produce enough “clean water” to “sell” and post a profit on their budget sheet.

STEM Day 2014

<https://www.youtube.com/watch?v=PGrNfPmoTGO>



