

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 early learning to 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 and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. 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.

Name of Principal: **Mr. Taylor L. Porter**

Official School Name: **James N. Gamble Montessori High School**

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: 02/02/2021



Name of Superintendent: **Mrs. Laura Mitchell**

District Name: **Cincinnati Public Schools**

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

Laura Mitchell

(Superintendent's Signature) Date: 02/04/2021

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: **Ohio Department of Education**

Name of Nominating Authority: **Mrs. Charlotte Jones-Ward**

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

Charlotte Jones-Ward

(Nominating Authority's Signature) Date: 2/19/2021

SUBMISSION

The nomination package, including the signed certifications, narrative summary, documentation of evaluation in the three Pillars, and photos should be submitted online according to the instructions in the Nominee Submission Procedure. OMB Control Number: 1860-0509 Exp Date: Dec.31, 2023

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.



Green Ribbon School Application

School Information

School: James N. Gamble Montessori High School **District:** Cincinnati Public Schools

Applying as Building

Applying as District

District Number: NCES District ID: 3904375 State District ID: OH-043752

Address: 3036 Werk Road, Cincinnati

Contact Persons: Taylor Porter, Principal, and Mary Dudley, CTE Agriculture Teacher

Email porteta@cpsboe.k12.oh.us / dudleym@cpsboe.k12.oh.us

Phone: (513) 363-2600 / (513) 218-2741

Top Official: Laura Mitchell – Superintendent

School Type:

- Pre-K, Elementary, **Middle or Jr. High**, **High School**, Postsecondary, K-12 District
- **Public**, Private, Charter, Other
- **Urban**, Suburban, Rural

Facebook: @gamblemont

Twitter: @gamblemont / @GMGators

Instagram: @gamblemontessori

YouTube: Cincinnati Public Schools and School Principal Taylor Porter

Does your school serve 40% or more students from disadvantaged households? YES

Total Enrollment: 607

Approximately what percentage of your school's students qualify for:

Free Lunch 100%

Reduced Lunch 100%

Graduation Rate: 92.6%

Attendance Rate: 91.1%

Special Education %: 36.14%

Minority %: 77%

Pell%: N/A

ESL population – School has 37 students with LEPS; 15 receive ESOL services.

SUMMARY NARRATIVE

James N. Gamble Montessori High School is in Cincinnati, Ohio. James N. Gamble Montessori is one of the first public high schools in the nation to be accredited by the American Montessori Society (AMS). James N. Gamble Montessori is uniquely positioned inside the heart of the city of Cincinnati on a beautifully maintained 14-acre campus. James N. Gamble Montessori has been recognized by the American Society of Heating, Refrigerating and Air-Conditioning Engineers as the first-place recipient of the 2020 ASHRAE technology award. This award is a national recognition for outstanding achievement in the design and operation of energy efficient buildings. This honor and others have come from our student-centered culture, Montessori curriculum, and a collective effort by students, staff and community to be true stewards of our environment.

James N. Gamble Montessori began our journey to become a Green Ribbon School in 2005, although some would say we began much earlier. To meet increased demand for Montessori junior high and high school classrooms, Cincinnati Public Schools planned a second Montessori high school to accompany our nation's first public Montessori high school (Clark Montessori). In the fall of 2005, our program began with two 7th grade classes in the basement of a dilapidated building and was planned to expand by one grade level each subsequent year until the program was a full 7-12 school. In August 2007, our school was moved to a swing space of another dilapidated building and officially became christened as a Montessori methods school, known as Westside Montessori High School. In January of 2011, our school's Local School Decision- Making Committee voted to reflect the heritage of our school's planned permanent home in Westwood by renaming our school James N. Gamble Montessori High School. Our school was named after James N. Gamble, a Westwood native, renowned inventor and philanthropist.

Finally, in 2019 our school moved into our current building home. Cincinnati Public School district spent nearly \$16 million dollars to fully renovate what used to be an all-girls private school and turn it into an immaculate place of education and a first-place winner of the ASHRAE technology award for energy efficiency buildings.

James N. Gamble Montessori High School has been fully renovated and upgraded. Our school is furnished with the highest quality materials and equipment available. James N. Gamble Montessori boasts state-of-the-art Building Automation System (BAS) that consist of exhaust fans, air handlers, air filtration, cooling coil, heating coil and numerous other components to guarantee only fresh air is circulated within our school. Our school is able to execute two complete air flush outs prior to any student entering the building daily and about six air exchanges per hour per space. In addition to the BAS air systems other improvements to the 143,000 square foot school and 14 acre campus include making significant updates to the building's grounds, kitchen, cafeteria, utilities, windows, media room, fire alarm systems, ADA accessibility, technology systems, and gymnasium. James N. Gamble Montessori uses the latest fiber technology thanks to our partnership with Cincinnati Bell. Fiber technology uses a cable, made up of thin strands of glass or plastic fibers, to transmit data modulated onto light waves. Just one strand of fiber is less than a tenth a human hair strand and carry tens of thousands of telephone calls at any given time. Cincinnati Bell invested nearly half a billion dollars in Fiber optics over the past decade to upgrade the infrastructure throughout our entire city. Unlike many older

school buildings, James N. Gamble Montessori has been able to take advantage of this great technology. That's not all, we also installed occupancy sensors that allow us to save energy as they force the lights to turn off when no one is in the room. When the room is occupied, the light sensors will turn on because our rooms are only energized based on occupancy controllers. We have the ability to change the settings for the motion sensor lights to more or less minutes depending on the needs of our students.

James N. Gamble Montessori and our Montessori methods are perfectly aligned with reducing environmental impact, improving health and wellness, sustainability, and many other aspects of the requirements for being a Green Ribbon school. We have established an internal health and wellness committee that is dedicated to improving the health of students and staff. This committee has organized organic food options for breakfast and lunch as well as run programming to help all employees take advantage of our district wellness works health program. Furthermore, we are continuing to improve our environmental sustainability by teaching our students through interdisciplinary learning projects. One of the pillars of our Montessori methods curriculum includes what we call Intersessions. During these Intersessions we take our students out into the world to gain experiences so they can understand the impact that they can have. We let them serve others so they can become valorized. We connect that service and that experience with what we are learning about in class so that learning does not simply happen from a book. For example, students study different forms of sustainable practices and technologies that buildings use to become more efficient. During the 11th grade fall intersession, the Juniors study with the Civic Garden Center, collecting data on rain water from different sites and experiencing the lessons at the green learning station (including permeable surfaces, rain gardens, greens roofs, and composting).

We've also created our Montessori Market committee in 2018. This committee has grown into a full-scale collaboration with local business, restaurants, and neighboring schools. The Montessori Market festival engages over 600 students and attracts over 30 local businesses to participate in our market each year. We have been able to raise over \$5,000 each year we run this festival and re-purpose those funds to support student field experiences.

We are proud of our community partnerships! The partnership we are most proud of is the advisory committee for our agriculture career and technical education program. This is a collaboration between 24 individuals who represent a diverse cross-section of industry professionals, production agriculturalists, community advocates and school district staff. The group meets quarterly as a whole and subcommittees meet additionally to tackle specific needs as defined by the advisory committee. All students in the school benefit from access to cutting- edge practices in the agricultural industry and opportunities to learn from local experts. In addition, having this significant group of people in the community gives occasion for those unfamiliar to our program to learn about our students and become involved in a variety of ways. The financial savings are numerous as we have been the recipient of generous donations of supplies, tools and expertise. The cost of the partnership is minimal and includes providing a meeting space and keeping records of agendas and meeting minutes.

The most exciting development at James N. Gamble Montessori is taking place in our Agriculture Career and Technology classroom. We have introduced our students and we are preparing our campus

for a pollinator garden, high tunnel hoop house and an electric tower garden. The tower garden uses an advanced form of hydroponics, aeroponics is the process of growing plants in an air or mist environment rather than soil. Aeroponic systems use water, liquid nutrients and a soilless growing medium to quickly and efficiently grow more colorful, tastier, better smelling and incredibly nutritious produce. This tower garden is in addition to our outdoor garden and hoop house which is scheduled to be installed in 2021. The hoop house is covered with woven polyethylene fabric that will help increase crop yields and extend the growing season. Our students have developed our school-based garden and orchard that consist of six raised bed mini gardens and 14 fruit trees. Our students also participated in National Tree Day 2020 by planting three Red Maple trees on our campus.

Our Agriculture education focuses on project-based learning that teaches 21st century skills to reach collaborative solutions related to the natural world. Students at James N. Gamble Montessori begin the program in their 7th and 8th grade year. Students engage in horticulture and culinary labs to learn about plant and food science as well as create and sell products for our student-run micro economy, The Montessori Market. In high school, students can elect to continue their exploration in agriculture education by taking additional courses that focus on animal and plant biotechnology, applications of food science and safety, business management for agricultural and environmental systems, and food marketing and research. Students also develop leadership skills through participation in the Future Farmers of America organization.

The FFA (formerly Future Farmers of America) is a national organization dedicated to preparing members for leadership and careers in the science, business and technology of agriculture. Local, state and national activities and award programs provide opportunities to apply knowledge and skills acquired through agriculture education. The Ohio FFA Association has 25,577 members in 324 chapters throughout Ohio.

James N. Gamble Montessori High School is part of the Good Food Purchasing Program and Lifetime Foundation Harmful 7 Elimination. Our school, James N. Gamble Montessori High School, won a Bronze Level Ohio Breakfast Challenge Award in the 2019-2020 school year. The Good Food Purchasing Program (GFPP) is a coordinated local-national initiative that harnesses the power of procurement to create a transparent and equitable food system. The system is built on five values: local economies, nutrition, a valued workforce, environmental sustainability and animal welfare. GFPP, in conjunction with our Clean Label Initiative, helps our school ensure students can access healthy food during the school day. Improving healthy food access can contribute toward reducing their long-term risk of diabetes, heart diseases, and other conditions that disproportionately impact low-income communities and people of color. In January 2019, our district adopted the GFPP. James N. Gamble Montessori provides a water bottle made from 100% recycled plastic for each of our 608 students. At James N. Gamble Montessori High School, we are intentional about recycling everything, including water and waste. The easiest way to see an example is to look at the water filling stations on every floor of the school. Since these filling stations have been installed in 2019, we have saved 7,722 bottles of water.

PILLAR ONE: NET ZERO ENVIRONMENTAL IMPACT

Element 1A: Zero greenhouse gas (GHG) emissions

We have not received the U.S. Environmental Protection Agency's ENERGY STAR certification, but we have received the first place ASHRAE Technology Award which is a national recognition for outstanding achievement in the design and operation of energy efficient buildings. James N. Gamble Montessori High School has been fully renovated, demolished down to the studs and rebuilt to a magnificent, instructional facility. Our building has been evaluated for air quality, and district officials have no safety concerns.

CPS invested \$16 million in improvements to the 143,000 square foot, 14-acre site of the historic former Mercy High School, making significant updates to the building's grounds, kitchen, cafeteria, utilities, windows, media room, HVAC, fire alarm systems, ADA accessibility, technology systems, gymnasium and sports facilities, and installing all new furniture.

Our building was totally renovated in terms of an electrical upgrade. We installed LED lighting which decreases the amount of voltage and lamps. We also installed occupancy sensors. These occupancy sensors allow us to save energy as they turn off to save energy when no one is in the room. When the room is occupied, the light sensors will turn on because our rooms are only energized based on occupancy controllers. We have the ability to change the settings for the motion sensor lights to more or less minutes depending on the needs of our students. We are still purchasing our energy from Duke Energy. We engage in a power shutdown that is meant to analyze where we can save on electrical energy use. This shutdown occurs two times during the school year. We won the ASHRAE award worldwide. This was based on design and the energy savings that is based on the design mechanically. The building was originally supported by a gas steam boiler. We redesigned it for energy savings. We now have energy savings with heat pumps. We designed a mechanical system that no longer utilizes gas for heat. We depend on refrigerants to cool our building.

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

The agriculture education program at James N. Gamble Montessori High school built a framework for students to understand their role in the natural world. Beginning from a historical context of early agriculture, students develop a sense of place and responsibility for the environment. Students realize their potential as community activists and practice skills and severance learning, horticulture, food science, biotechnology and business management. One of our core values is community, and we uphold that core value with our socially, beneficial garden. This garden includes an orchard with fruit trees and raised beds that grow the following: kale, iceberg lettuce, spinach, apples, peaches, pears, and plums. Our students also create mint or lemon balm in order to sell tea, custom candles using essential oils, and this year we plan to bring beehives on our site. A community garden has inspired us to develop a Montessori Market. The Montessori Market entails supervised agricultural experiences, employability skill development, entrepreneurship, Erkinders, financial responsibility and produce development.

At James N. Gamble Montessori High School, we are intentional about recycling everything, including water and waste. The easiest way to see an example is to look at the water filling stations located on every floor of the school. Since these filling stations have been involved since 2019, we have saved on average 7,722 bottles of water. Our district provided reusable water bottles for each student. This allows us to reduce plastic waste. We are able to filter our water in terms of recycling, which allows us to have cleaner water. One of the ways we do this is through regular audits from our facilities team to ensure the upkeep of our domestic piping. All domestic piping was upgraded in our school, and our facilities team uses a checklist to monitor this on a quarterly basis. In the past, we would see utility bills that are high even when our building was not in use. This issue has been minimized in part thanks to our quarterly audits.

We have a facilities manager, a building engineer, and an environmental safety manager who work together to ensure our water is lead-free.

All new landscape installation projects focus on sustainability. Our orchard was designed to demonstrate the power of permaculture guilds, our rain garden utilizes only native plants that will support our native pollinators while also reducing stormwater runoff. Our edible gardens focus on hardy herbs and cool season crops that students can sow, grow and harvest before summer break.

While we do not currently have a rainwater collection system we have consciously designed our raised bed and orchard areas to be on a slope that will allow for natural drainage and will lend itself to the use of drip irrigation hoses that utilize harvested rainwater in the future.

In addition to the water filling stations our school has been outfitted with all low flow toilets and sinks. We also have brand new World Dryer VERDEdri hand systems in each restroom. This system leads in sanitation, efficiency, and sound quality. It dries hands in as little 12 seconds, while only using 3.16 watts-hrs and operating 30% quieter. The HEPA filter captures 99.97% of particles, 0.3um or larger, cleaning air before it reaches hands. Touchless operation ensures a clean and confident user experience

Element 1C: Reduced waste production.

James N. Gamble Montessori High School has a student-led program for composting organic waste. To start our program and make it effective, our students conducted an audit to gather vital information to help us determine container size, capacity, and location. We knew we would have sustainable supply because our school only allows students to have natural and organic snacks throughout the school day such as apples, oranges, and bananas. These are examples of biodegradable products. Our students completed the programs with a series of informational fliers and infographics to educate the school community on the purpose of the compost bins and how to use them appropriately. We are proud to have a self-sustaining program where the waste ultimately finds its way to the community garden.

Cleaning and paper supplies are non-toxic green products. We have low-flow toilets and faucet sensors

and heated hand drying sensors to help us reduce our need for paper products. The building materials we do consume were obtained within a 500-mile radius.

We have developed a partnership with Rumpke waste management services. This program allows us to provide a waste basket and a recycling basket for every classroom and office in our school. We additionally have been provided with a huge commercial-size recycling bin in our parking lot. We have recycling bins in each classroom and office.

We work with many different vendors, and we always try to find vendors who use green products. Our facilities team no longer uses bleach as it has been proven to be harmful to the environment. Our school has been staffed appropriately with four custodians and one building engineer; all of whom have been trained by the district facilities manager.

Pest and pesticides are taken seriously at James N. Gamble Montessori High School. We have licensed exterminators employed by the district who inspect our school monthly. There is a work order system which they work from, but they also have a routine for all 60 buildings including a checklist to determine what to treat.

We work hard to ensure we have proper ventilation and filtration, especially during COVID. We increased our original filter change to quarterly. We utilize an independent heat pump to regulate the temperature in our building. We have controls in each room inside the building, but they are only for comfort purposes. Outside of the heat pumps, we have a dedicated outdoor air system, (DOAS). Such a system ensures that we are not recycling air inside of our building from room to room. The procedures in place include the following steps: Filter changes as recommended by equipment manufacturers or quarterly, monthly filter inspections documented by building engineers and confirmed by supervisors, we increase air filtration to as high as possible without significantly diminishing design airflow, we confirm proper filter fit to minimize filter bypass, and ensure all exhaust fans are working properly. We have six air exchanges and a two-hour building flush out prior to occupancy each day. Our Covid procedures have been set in place and tested. Merve 13 is able to successfully remove 90% of E3 particles, 85% of E2 particles, and 50% of E1 particles. This air system constantly provides fresh air as long as the building is occupied.

Element 1D: Use of alternative transportation to, during and from school.

In our district, transportation service is offered daily. We use a combination of public Metro buses, yellow buses, and Universal Transportation System for students that have unique circumstances.

Routes are designed according to state and district safety operating procedures and industry best practices. Routes are designed to serve the maximum number of students and keep the trips as short as possible.

School transportation services are designed with the "Safety First" concept in mind. All services meet or exceed local, state and national statutes and regulations. Bus drivers are interviewed, trained and licensed in accordance with state and national statutes and regulations. Buses are maintained and inspected in accordance with state statutes and regulations. Safety is a continuous process due to

changing conditions.

Our district, and subsequently our school, are one of the first in the country to collaborate with Vision Zero partners on the new Safe Routes to School plan. The goal is zero traffic deaths and serious injuries in the CPS District. Unfortunately, there have been a number of students across the city involved in traffic accidents as they walk to school. As a part of our Vision Zero program, our school has run special campaigns to encourage staff to go outside and serve as crossing guards and supervise students as they come and go from our campus.

Last year we invested in multiple bicycle stands at the request of our students who wanted to ride their bikes to school. The freestanding precast concrete bike stand parks multiple bikes with one easy placement. Concrete aggregate blends with the outdoors and offers strength and durability without the need for maintenance. Five 1/2" plated loops allow users to secure their bikes with a cable lock. Our student interest and commitment to world class facilities inspired our entire school community and we ended up establishing an entire "bike to school" event.

Below is an excerpt from a local news story on our school safety concerns and solutions: [Find the article here.](#)

"The first day of school last year at Gamble Montessori High School was a little chaotic, as they often are everywhere. It was the first day in a new location, with hundreds of students and parents flowing in during the morning rush to the new site, the former Mother of Mercy of High School on busy Werk Road in Westwood. For some reason, the street signs warning drivers to reduce their speed in the school zone weren't flashing as they should have been. Just months after a series of accidents involving pedestrians in Westwood, safety was on the mind of the school's new principal, Taylor Porter. Although there may have been a thousand other things that demanded his attention that day, "I decided to put a vest on and go out there and control traffic myself," Porter says. Porter got slapped on the wrist for that but, "No kids were hit, and no kids were hurt, so I'll take it," he says. The authorities may have taken a dim view of the principal's ad hoc traffic control, but at least one Gamble Montessori parent was thoroughly impressed. "That was the moment when I said, 'We are sending our son to the right school,'" says Andrea Boettcher. "It felt like he understood the community and what it was all about." Only 12 years old, Gamble Montessori High School has quickly become an anchor institution in Cincinnati's largest neighborhood.

PILLAR TWO: NET POSITIVE IMPACT ON STUDENT AND STAFF HEALTH

Element 2A: An integrated school/district environmental health program based on an operations and facility-wide environmental management system that considers student and staff health and safety in all practices related to design, construction, renovation, operations and maintenance of schools and grounds.

We have developed a partnership with Rumpke waste management services. This program allows us to provide a waste basket and a recycling basket for every classroom and office in our school. In addition to the interior to our school, we have been provided with a huge commercial size recycling bin in our parking lot for our recycling program.

We work with many different vendors, and we always try to find vendors who use green products. Our facilities team no longer uses bleach as it has been proven to be harmful to the environment. Our school has been staffed appropriately with four custodians and one building engineer; all of whom have been trained by the district facilities manager.

Pest and pesticides are taken seriously at James N. Gamble Montessori High School. We have licensed exterminators employed by the district who inspect our school monthly. There is a work order system which they work from, but they also have a routine for all 60 buildings including a checklist to determine what to treat.

We work hard to ensure we have proper ventilation and filtration, especially during COVID. We increased our original filter change to quarterly. We utilize an independent heat pump to regulate the temperature in our building. We have controls in each room inside the building, but they are only for comfort purposes. Outside of the heat pumps, we have a dedicated outdoor air system, (DOAS). This system ensures that we are not recycling air inside of our building from room to room. The procedures in place include the following steps: Filter changes as recommended by equipment manufacturers or quarterly, monthly filter inspections documented by building engineers and confirmed by supervisors, we increase air filtration to as high as possible without significantly diminishing design airflow, we confirm proper filter fit to minimize filter bypass, and ensure all exhaust fans are working properly. We have six air exchanges/hour/space, and a two-hour building flush out prior to occupancy every day. Our Covid procedures have been set in place and tested. Merve 13 can successfully remove 90% of E3 particles, 85% of E2 particles, and 50% of E1 particles. This air system constantly provides fresh air as long as the building is occupied.

Element 2B: High standards of nutrition, fitness and quantity of quality outdoor time for both students and staff.

Each student engages in school-supervised physical education five hours each week. Throughout the course of a week students may engage in outdoor activities in a variety of class settings. Teachers use the outdoors to give students opportunities to be peaceful, find beauty in nature, learn to identify common plants and animals, tend the gardens and grounds, and navigate public transportation options and much more. Our school campus includes 4 outdoor classrooms and an extensive land lab with a

maple grove/sugar bush, arboretum, spring bulb garden, permaculture orchard, raised beds for edible plantings and kitchen herb garden in addition to a practice field for team sports and open spaces for group initiatives.

James N. Gamble Montessori High School is part of the Good Food Purchasing Program and Lifetime Foundation Harmful 7 Elimination. Our school, James N. Gamble Montessori, won a Bronze Level Ohio Breakfast Challenge Award in the 2019-2020 school year. The Good Food Purchasing Program (GFPP) is a coordinated local-national initiative that harnesses the power of procurement to create a transparent and equitable food system. The system is built on five values: local economies, nutrition, a valued workforce, environmental sustainability and animal welfare. GFFP, in conjunction with our Clean Label Initiative, helps our school ensure students can access healthy food during the school day. Improving healthy food access can contribute toward reducing their long-term risk of diabetes, heart diseases, and other conditions that disproportionately impact low-income communities and people of color. In January 2019, our district adopted the GFFP. Student Dining Services proudly partners with local growers and Ohio Proud Manufactures. We source 90 percent of our milk and 30 percent of our produce from local farmers. We are Ohio Proud! According to our most recent GFFP evaluation of our program, 100% of our seafood is environmentally sustainable and 25% of our animal protein products are RWRAU (raised without routine antibiotic use). This current school year our local purchasing is at 53.44%. At James N. Gamble Montessori High School there are currently 11 raised beds used for growing edible crops such as strawberries, leafy greens, peas, radishes, carrots, etc. In 2020, students installed a permaculture orchard with the support of a local nonprofit who donated apple, pear, peach, nectarine, plum, elderberry and locust trees. Every aspect of the school garden and orchard is maintained by students in all grade levels. Students plan, build, plant, cultivate, maintain and harvest. The school garden is researching the process of becoming GAP certified in order to have the permits needed to serve produce from the garden in the school cafeteria. Currently, the produce grown on school grounds is used for food science classes, horticultural skill development and to promote healthy nutrition options.

Additional health and fitness programs include organized athletic sports for students. Our current athletic options include basketball, football, baseball, volleyball, soccer, dance team, cheerleading and garden club. Staff are invited to participate in mindfulness practices with our school psychologist and through secondary Montessori teacher training programs. Our health and wellness committee organizes events for all staff members to collaborate in healthy initiatives such as a biggest loser challenge, team bowling, onsite health screenings and flu vaccinations. Our school also partners with Central Clinic to provide behavioral and academic counseling.

PILLAR THREE: 100 PERCENT OF THE SCHOOL OR DISTRICT'S GRADUATES ARE ENVIRONMENTALLY AND SUSTAINABILITY LITERATE

High School students enrolled in an environmental science elective developed projects that required them to research environmental issues in our local community and develop solutions for addressing that issue. Students wrote letters to politicians, made videos and digital presentations, and also designed logos, magnets or t-shirts to raise awareness about the issue.

Environmental and sustainability concepts are the core of the environmental science curriculum. We discuss a wide range of topics from biodiversity and ecological relationships, food production, water & air quality/pollution, climate change, human impacts on environmental systems to politics, ethics, social justice and all of the ways these interact to determine the survival or demise of our planet. In the curriculum, students are involved in biodiversity labs, phenology tree studies, Ohio River water tests, mock climate summits and Socratic seminar discussions. Students also invite local speakers to talk about environmental practices and their careers in the field of environmental conservation. Guests in the past have included an ecologist with the Cincinnati Zoo, water engineers working on the Mill Creek, food rescue volunteers from La Soupe, and scientists from the Ohio River Foundation.

Our curriculum is aligned with the 2020 Ohio learning standards. At James N. Gamble Montessori, our primary Career-Technical Education (CTE) courses are Agriculture, Food, and Natural Resources. Career-Technical Education (CTE) teaches students specific skills in 16 career pathways that apply to high-demand careers. CTE courses focus on skills. This differs from traditional and university-based education, which is based on theory. CTE includes some theory in introductory materials. Practice, hands-on experience and application tests are vital pieces, because CTE careers require workers to have experience before starting. CTE Career Pathways — students can earn numerous Industry Credentials in high school within their pathways.

To kick off the beginning of each school year staff gathers for a half day retreat where we can reconnect and build community before students return to school. These events take place in a natural setting and have included canoe trips down the Little Miami River and invasive species removal at Mt. Airy forest. Staff engage each other in group initiative activities and are encouraged to repeat these with their students outside around the school campus. Staff are encouraged to take group lunches outside and hold team meetings in the outdoor classrooms located around the 14-acre campus.

Our curriculum focuses on inquiry based and constructivist learning methods, such as asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, using mathematics and computational thinking, constructing explanations and engaging in argument, and applications based on evidence. Students are encouraged to pursue their goals related to creating a more just and sustainable world. At every grade level, students are provided with deeply meaningful experiences in nature. Middle school students attend fall camp, in the spring head to either leadership camp or conduct marine studies at Pigeon Key, attend agriculture classes and participate in horticultural community service projects. Fall camp is a four-day, three-night primitive camping experience where 7th & 8th grade students engage with the natural world through pioneering

activities, canoeing on the Little Miami River, and conducting service work at the campsite. Students work together to set up and take down their tents, prepare daily meals for the entire group, haul water, etc. Science, math, language arts and social studies lessons are also embedded into the experience. Leadership camp is a three-day two-night leadership development program for 7th graders that provides opportunities for team-building and collaborative problem-solving as well as challenge-by-choice experiences that allow students to extend themselves beyond their perceived limits. In collaboration with the Pigeon Key Foundation, 8th grade students participate in six days of immersive study on site at the Pigeon Key Marine Science Center in Florida. This trip serves as a culminating, real-world application of science concepts learned over the course of two years of study. After their middle school years, students extend their Erdkinder experiences into their high school years. Erdkinder is a central tenant of Montessori philosophy and promotes the importance of teaching adolescent children the value of their neighbors and the responsibility of caring for our fragile environment. High school intersessions are two-week immersive learning experiences that take place “between sessions” (mid-semester). Students are offered a wide variety of focus areas to choose from, including but not limited to practical life skills, hiking in the Smoky Mountains, whitewater rafting, urban farming and sustainability, animal rescue and conservation. During high school intersessions, students keep journals, discuss challenging issues relating to social justice and environmental sustainability, perform acts of community service and synthesize their experiences into professional-grade presentations.

Element 3B: Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy.

Students who attend James N. Gamble Montessori High School are taught the interconnectedness of the universe and experience a spiraling curriculum that builds upon the critical elements of science education. Students are grouped into mixed age classrooms which is a Montessori Method used to build leadership skills and allow for deeper educational experiences into the exciting study of biology.

Beginning early in their academic career, middle school students are able to take introductory agriculture education courses taught by a certified career-technical education teacher. The agriculture program is supported by an advisory committee comprised of more than two dozen community leaders, city officials, nonprofit educators, production agriculturalists and interested stakeholders. These advisory members promote internship and job opportunities for students in the field of environmental stewardship and sustainable agriculture. High school students who opt to take electives in the agriculture pathway are eligible to earn additional credentials in the field and test out of certain post-secondary introductory level courses. Post-secondary options presented to students focus on organizations that have robust agriculture and community activism programs. Students are encouraged to take advantage of scholarships and grants that support minorities in the field of agriculture.

Element 3C: Development of civic engagement knowledge and skills, and students' application of these to address sustainability and environmental issues in their community.

Community and Civic Engagement

Throughout their career at James N. Gamble Montessori High School; students engage in a variety of forms of community service. Middle school students in 7th and 8th grades have boarded busses and helped remove invasive species growing along the Mill Creek water source in partnership with local community guides. High school students in 9th-12th grades serve their community during fall and spring intersessions as they volunteer at a local educational farm, prepare the neighborhood community garden for planting and assist animal adoption and rescue teams. Seniors spend months preparing their senior projects; each of which includes a community service component and have ranged from food and clothing drives to prenatal nutrition education to planting annual flowers in public spaces.

When middle school students attend their annual fall camping field study, they enjoy time in nature, learning to canoe down the Little Miami River and also how to work with their peers as they prepare their own meals, pitch their tents and care for their campsite. During the three-day experience, there is also a built in time for the students to serve their hosting organization by clearing brush, moving mulch and other tasks as requested. Students in 8th grade travel far from home and spend several days in Pigeon Key, FL.

When seeking out opportunities for students to engage with their community, teachers approach local nonprofit groups whose missions align with the values of our Montessori culture. Students who have spent the night in nature and floated down the river form a bond with their surroundings and are ready to take the next step to activism as they establish their adult identities.

The natural world is utilized for both content and setting as teachers take advantage of the four outdoor classrooms dotting the 14-acre campus. In the short span of two years nearly all of the invasive Amur honeysuckle has been removed from the property due to the work of generous volunteers and student efforts. Having recently established a partnership with a local beekeeper, plans are currently underway to install a native plant habitat to support native pollinators. Existing native species such as iron weed and goldenrod are allowed to flourish and provide valuable lessons in ecosystem dynamics. Sugar maple trees are tapped in the late winter to teach students about the value of seasonal knowledge and sustainable ways to harvest the forest. The site of the metal buckets hanging from their spiles prompted a neighbor to present to the class about his time working on a maple farm. There are currently 11 raised beds used for growing edible crops such as strawberries, leafy greens, peas, radishes, carrots, etc. In 2020, students installed a permaculture orchard with the support of a local nonprofit who donated apple, pear, peach, nectarine, plum, elderberry and locust trees. Volunteers came out to help students plant the orchard and included city officials, university students, parents and local experts. The campus also includes an herb garden where students grow herbs they harvest, dry and crush to create tea blends that are shared with our school community.



James N. Gamble Montessori middle school students harvest fresh greens in early spring! Using row cover we have been able to extend our growing season and begin seed germination indoors for a full harvest of cool season crops before school breaks in May.



James N. Gamble Montessori students remove the recycling from each office and classroom for the recycling program.



James N. Gamble Montessori students prepare a gourmet salad using freshly harvested produce from their own school garden supplemented with local items. They also make their own salad dressings!