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.

U.S. Department of Education Green Ribbon Schools

☐ Public ☐ Charter ☐ Title I ☐ Magnet ☐ Private ☐ Independent ☐ Rural					
Name of Principal: Mrs. Kimberly S. Grant					
Official School Name: Lincoln Heights Environmental Connections Magnet Elementary					
Official School Name Mailing Address: 307 Bridge Street, Fuquay Varina, NC, 27526					
County: Wake State School Code Number: 476					
Telephone: 919.557.2587 Fax: 919.694.8627					
Web site/URL: https://www.wcpss.net/lincolnheightses F-mail: kgrant@wcpss.net					

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

Kunibuly S. grant

Date: 2-11-2020



Name of Superintendent: Cathy Q. Moore

District Name: Wake County Public School System

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

Carry Prone

Date: 2-12-2020

(Superintendent's Signature)

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: North Carolina Department of Public Instruction Name of Nominating Authority: Mr. Jon Long, Architect, School Planning

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

JL-

Date: 2-12-2020

(Nominating Authority's Signature)

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 Expiration Date: March 31, 2021

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.

ED-GRS (2019-2021) Page 2 of 2



School Contact Information:

School Name: Lincoln Heights Environmental Connections Magnet Elementary School

District Name: Wake County Public School System (WCPSS)

School Address: 307 Bridge Street
City: Fuquay-Varina
State: North Carolina

Zip: 27526

School Website: https://www.wcpss.net/lincolnheightses
Facebook Page: https://www.facebook.com/LHECMES/

Twitter: @LHECMES
Principal Name: Kim Grant

Principal Email: kgrant@wcpss.net
School Phone Number: (919)557-2587
Lead Applicant Name: Laura Wood

Lead Applicant Email: ljwood@wcpss.net Phone Number: (919)557-2587

School Information:

School Type: Public

Grades Served: Elementary PreK-5

District Type: Suburban
Current Enrollment: 492
Attendance Rate: 96.5%

Graduation Rate: 100% of regular education 5th graders were promoted in 2019, 3 self-contained

students stayed back to have one more year before moving to middle school

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

% Receiving FRPL: 40.1% % Limited English Proficient: 9.8%

Other Measures: Students with disabilities- 16.7%

Is your school in one of the largest 50 districts in the nation? Yes

Summary Narrative:

Provide a 2-3 page summary narrative describing your school's efforts to reduce environmental impact and costs; improve student and staff health; and provide effective environmental and sustainability education. Focus on unique and innovative practices and partnerships.

Opening Statement: Lincoln Heights Environmental Connections Magnet Elementary School (LHECMES) is an excellent candidate for the U.S. Department of Education Green Ribbon Award. In 2018 our building renovation



was complete, and our new magnet theme of Environmental Connections was initiated. We are creating positive environmental impacts and enabling students to reconnect with the outdoors, to combat Richard Louv's "Nature Deficit Disorder." Our school vision is that "LHECMES students will build relationships and engage with their environment to become empowered citizens." In order to do this, "All students will engage in hands-on environmental opportunities." To facilitate this, 2 Environmental Inquiry (EI) teaching positions were created and students have 2 days of EI back to back to better allow for PBL work. An Environmental Connections Integration Specialist (ECIS) position was created to focus on curricular integration, grants, scheduling professional development, guest speakers, field trips and more. Expeditions are 30-minute clubs at the end of each day to allow students to further investigate magnet theme related topics of their choice. They change each quarter.

Pillar I: In the design of our newly renovated spaces, WCPSS integrated best practices for reducing energy costs and increasing efficiency, reducing water use and storm water runoff. All lights in our building are fluorescent and have motion sensors to automatically turn off lights after a certain period of no movement, which indicates that no one is in the room. Besides saving money, the motion detection light switches help reduce our impact on the environment. We have thermostats in every room to accurately monitor temperatures and climate control is managed centrally to differentiate conditions for various areas and it also allows certain areas of the building's heating/cooling to be turned off during non-use time, saving electricity and costs. Students are only allowed to use certain doors for exiting and entering the building, reducing the impact of outside air entering the building.

Most of our faucets are on timers and have aerators to reduce water use. These timer faucets will only dispense water (for a given time frame) after the button is pushed, reducing water usage and reducing our environmental impact and saving money. Our renovation included the creation of a new 2 story wing to reduce the footprint and impermeable surfaces. Our campus has 2 storm water runoff measures to slow down and spread out runoff before it goes into the storm drains to reduce sediment in our waterways. We are looking forward to Spring to the installation of our large cistern and critical area planting and/or rain garden to further offset storm water runoff. Our landscaping was designed to feature native plants and other vegetation adapted to our climate and annual rainfall eliminating the need for an irrigation system.

Our recycling upgraded from paper to all comingled materials, therefore increasing the volume of materials diverted from the landfill. Our art teacher collects markers school wide for recycling and Crayola estimates we have recycled 2023 markers (about 40.5 pounds) over the last 2 years. Our art teacher, along with many other teachers, use a variety of recyclable/upcycled materials for students to create their artwork and projects with. Our custodians collect batteries to keep them from going into the landfill. We have "These Come From Trees" stickers on all of the paper towel dispensers throughout the school to remind students and staff that the paper is a resource from trees and not to waste paper towels. After Halloween, we did a Terracycle candy wrapper recycling campaign with multiple boxes in the building. In changing our carpool procedures, we have reduced wait time and idling. We added safety patrol student helpers in the morning and now use an online spreadsheet to que up students more efficiently from the cafeteria to their carpool color cone in the afternoon. With our safe routes to school improvements, we have created safer conditions for our students who walk/bike to school.

Pillar II: Written summary of efforts and accomplishments.

We have a dedicated team of 4 custodians that monitor and manage the environmental conditions in our building. They have staggered schedules from early morning to late evening to ensure someone is always on site. A set schedule is followed for dusting, mopping, vacuuming, and cleaning surfaces reducing allergens that could



impact the health of our students. Our head custodian performs daily checks and is our "first responder" for any potential environmental or health hazards within and around our building. WCPSS has multiple staff in all areas of facilities to ensure any environmental or health issues are addressed and remediated promptly with professional staff. WCPSS believes in IPM and therefore has significantly reduced the usage of pesticides around campus. Strict policies are in place within WCPSS regarding the usage of pesticides, reducing any potential student exposure.

Our PE teacher follows the NC Standard Course of Study that includes nutrition and fitness throughout. He utilizes outdoor opportunities when appropriate for the skill, facilitates Jump Rope for Heart fundraiser and manages student qualification and participation in the "First in Fitness" competition. Our PE teacher organizes our February family engagement night with the theme of Family Fitness. We have clubs during the day once every other week for 4th and 5th grade students including jump rope, yoga and run club. After school we have First Tee golf and we will have a bike club in the spring.

In partnership with Poe Health Center, we take part in National Walk/Bike to school day twice a year. In April, we participate with them in "Every Kid Healthy Week" and showcase different topics each year. Poe Health Center is working with our cafeteria on the "Smarter Lunchroom Movement" to encourage healthier eating choices and reducing food waste. We have 3 tower gardens in our building and we have an Expedition where students work in our raised gardens to grow produce. Those students take walking field trips to our neighborhood emergency food pantry to donate our harvest to benefit those in need. Students also learn what the food pantry is, how it works and they have a greater appreciation for the foods they grew.

Restorative practices help create bonds and sense of community within our school. We have 15 staff who are trained circle keepers and a school coach who is on campus one day a week. We use circle to improve our school climate and even have parents participate at the beginning of the school year. Our school counselor is here full time and goes into each classroom at least once a month to teach social emotional lessons. She also holds different groups to help students improve on certain skills. Classroom teachers can submit positive behavior referrals and give character trait awards. Our counselor, psychologist and social worker are trained in a variety of techniques and skills to utilize when more in depth and critical situations arise with students and families. Our social worker works within the local community to advocate for our students and the supports they need and in turn, she ensures our families are aware of the resources available to them. Our local police department teaches our 5th graders about making good decisions and helps prepare them for middle school. We partner with BackPack Buddies to provide 33 students healthy and nutritious foods on the weekend. In order to be sure we are identifying and responding to any inadequacies in our school, we have formed an Equity Team this school year that is beginning to tackle those important concerns.

Pillar III: Written summary of efforts and accomplishments.

Being an Environmental Connections Magnet school, all classroom teachers and specialists are working to increase environmental and sustainability literacy and integrate environmental and sustainability concepts across all curriculum. Our entire staff has completed Project Learning Tree and PBL training and are participating in yearlong UTOTES activities in partnership with the NC Museum of Natural Sciences this year. Our ECIS teacher maintains a spreadsheet of all upcoming relevant professional development opportunities and we have 6 staff members working on, or interested in, obtaining their NC Environmental Educator certification. Across grade levels and specials, in EI and Expeditions, there are many opportunities for outdoor learning throughout our



school. Teachers use the outdoors for all subjects, not just in science because we want students to see environmental connections in every aspect of learning. Many of these connections are due to the cross curricular nature of the EL modules in Language Arts that focus on environmental topics such as birds in 1st grade, pollinators in 2nd, water scarcity in 3rd, animal behaviors in 4th and the rainforests in 5th grade. In addition, there are many social studies standards across grade level that have connections about human impacts, as well as systems in place to facilitate change to be better stewards of the environment. Many math standards can be explored using the outdoors and PE and art, as well. We have many opportunities for real world connections and to learn about careers in the environmental and sustainability fields. We have numerous guest speakers come in person to share information such as the President of Wake Audubon, professors and students from NC State University and local and state park and forest rangers. We have live video chats with the State Climate Office and the NC Museum of Natural Sciences and field trips to local Environmental Education centers, the local landfill and the NC Aquarium. We are participating in Citizen Science research using the trail cameras to track and identify wildlife, monitoring and recording precipitation in the CoCoRaHS network and having "Shad in the Classroom" where will receive eggs to nurture and then release the American Shad fry into the local watershed. We are involved with the community by having partners such as the South Wake Conservationists who came out to till an area for our new "No Mow Zone" and planted native wildflowers. In the Spring we will be getting our mini-pond and a butterfly garden with our UTOTES partnership with the NC Museum of Natural Sciences. Another Community Partner is the Wake Soil and Water Conservation District as we are working on projects to become a "Wake Watershed Stewardship School," we participated in the Wetlands Poster Contest and we have started an Envirothon team in conjunction with them. Another way we interact with the local community is through our monthly family engagement nights and our October theme was "Outdoors in October" where we had numerous activities for families to participate in, as well as nature bingo cards, seed balls and more to take home. The NC Partners in Amphibians & Reptile Conservation (NCPARC) coordinated with our after-school program to come in and educate students about reptiles, amphibians and their habitats, as well as bringing live animals for the students to interact with. Our school maintains Bridge Street for the Adopt-A-Highway program through the NC Department of Transportation and we have parent and community volunteers take part. One of our EI teachers is involved in a Marine Debris study and therefore, our 4th and 5th graders will be analyzing the types of litter collected from our most recent clean up. In the Spring we are planning on the installation of our new cistern to reduce storm water runoff, as well as our very own observational beehive. All these activities are helping our students to learn about the environment, and we have a marked increase in our 5th grade science test scores.

Participation and Awards:

- 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 (EPA ENERGY STAR Portfolio Manager)
- 2. Has your school, staff or student body received any awards for facilities, health or environment? Yes

Year	Award Received
2016-17	Advocates for Health in Action "Emerging Wellness Advocate Award" recipient
2017-18	Advocates for Health in Action "Sneakers and Spokes Award" recipient



2020 Engineering Excellence in Wastewater and Stormwater to Alpha and Omega Group for the renovations project at Lincoln Heights

Pillar I: Reduced Environmental Impact and Costs

rillai I.	Reduced Environmental impact and	COSIS		
Energy:				
1. Can you	r school demonstrate a reduction in Greenhouse Gas	emissions? Xes No		
•	• Percentage reduction: 25.5% Over: 6/2018 to 6/2019			
•	Initial GHG emissions rate (MT eCO2/person):	0.75		
•	Final GHG emissions rate (MT eCO2/person):	0.66		
•	ou calculate the reduction? Energy data entered into with our original 1960's building with additional mod	- · · · · · · · · · · · · · · · · · · ·		
2. Do you t	rack resource use in EPA ENERGY STAR Portfolio Mar	nager? 🛛 Yes 🔲 No		
•	If yes, what is your score? 72			
•	If score is above a 75, have you applied for and rece	eived ENERGY STAR certification?		
	Yes No Year: N/A			
3. Has your	school reduced its total non-transportation energy	use from an initial baseline? Yes		
•	Current energy usage (kBTU/student/year): 7413.60	6		
•	Current energy usage (kBTU/sq. ft./year): 39.1			
•	Percentage reduction: 28.5%			
•	Time period: 6/2018 – 9/2019			
•	 How did you document this reduction? Energy Star Portfolio Manager (Using baseline data from 2009 with our original 1960's building with additional modular units and 200 more students) 			
4. What pe	rcentage of your school's energy is obtained from:			
•	On-site renewable energy generation: 0%	Type: N/A		
•	Purchased renewable energy: 0%	Type: N/A		
•	Participation in USDA Fuel for Schools, DOE Wind for program: Yes No	or Schools or other federal or state school energy		
5. In what y	year was your school originally constructed? 1961			



- What is the total building area of your school? 93,287 square feet
- 6. Has your school constructed or renovated building(s) in the past ten years? X Yes No

For new building(s):

- Percentage of the building area that meets green building standards: N/A
- Total constructed area: N/A
- Certification and year received: N/A

For renovated buildings:

- Percentage of the building area that meets green building standards: N/A
- Total constructed area: N/A
- Certification and year received: N/A

Water and Grounds:

- 7. Can you demonstrate a reduction in your school's total water consumption from an initial baseline? Yes
 - Average Baseline water use (gallons per occupant): 2129 Gallon/Student/Year
 - Current water use (gallons per occupant): 996.75 Gallon/Student/Year
 - Percentage reduction in domestic water use: 61%
 - Percentage reduction in irrigation water use: N/A
 - Time period measured: 6/2018 to 6/2019
 - How did you document this reduction? (ie. ENERGY STAR Portfolio Manager, utility bills, school
 district reports): Energy Star Portfolio Manager (Using baseline data from 2009 with our original
 1960's building with additional modular units and 200 more students)
- 8. What percentage of your landscaping is considered water-efficient and/or regionally appropriate? 100% water efficient and/or regionally appropriate
 - Types of plants used and location: None of the landscaped areas are irrigated. Many plants are native to NC, and the rest are adapted to our climate and annual rainfall.
- 9. Describe alternate water sources used for irrigation: We typically do not irrigate. However, when needed, we have 2 rain barrels on campus and we will be getting a large cistern in the Spring.
- 10. Describe any efforts to reduce stormwater runoff and/or reduce impermeable surfaces: During our renovations, these efforts were integrated into the design plan. Our new building includes a 2nd story (which we did not have before) to reduce the square feet of impermeable surfaces. Behind the bus loop we have a bio-retention pond to hold water and in another area, we have a bed of rocks to slow down, spread out and drop



sediments from the water before it enters the other storm drain. In the Spring we will be getting a cistern and disconnecting a downspout and either a rain garden and/or a critical area planting.

- 11. Our school's drinking water comes from: Municipal water source
- 12. Describe how the water source is protected from potential contaminants: The Town of Fuquay-Varina purchases water for consumption from the City of Raleigh, Harnett County and Johnston County. In addition to the monitoring and testing done by our sources of supply, Town personnel take samples throughout the system on a monthly basis to ensure customers have a safe water supply. These samples are tested by an independent State Certified Laboratory.
- 13. Describe the program you have in place to control lead in drinking water: The Wake County Public School System has a Water Quality Management team that monitors school water quality, manages wastewater collection, treatment, and disposal from individual schools.
- 14. What percentage of the school grounds are devoted to ecologically beneficial uses? We are well on our way to becoming a Certified Wildlife Habitat by the National Wildlife Federation, a Monarch Waystation, as well as a Certified Native Plant habitat by the NC Native Plant Society.

Waste:

- 15. 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:
 - A Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): Our dumpster is 5.88 cubic yards and is full when emptied 5 days a week. So, for 20 school days in one month it is: 5.88x20 days=**117.6 cubic yards garbage per month**
 - B Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): Comingled- Nov. 2019 had 1 collection each week=4 total. Each cart's volume is .33 cubic yards. We had 4.75+3.5+3.5+2.5 (full) carts collected. 14.25x.33=4.70 cubic yards Cardboard- (6.56 cubic yards x 1/3 full) x 4 times a month = 8.66 cubic yards. Adding both comingled @ 4.70 + 8.66 for carboard we get a total of = 13.36 cubic yard recycled per month
 - C Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): We are not currently composting enough to signify a difference in our percentages.
 - Recycling Rate = ((B + C) ÷ (A + B + C) x 100):
 ((13.36 CY +0 CY) / (117.6 CY + 13.36 CY + 0 CY) * 100) = 10.20%
 - Monthly waste generated per person = (A/number of students and staff):

68 Staff & 492 Students = 560 people: 117.6 CY / 560 = .21 CY/Month



- 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? WCPSS orders most of the paper for all the county schools under multiple contracts and distributes it to the schools as requested. Only a small portion is purchased by and sent directly to us from vendors and parents, therefore numbers cannot be determined.
- 17. List the types and amounts of hazardous waste generated at your school: No hazardous waste is generated at LHECMES- not for science, cleaning or any other purposes.
 - Describe other measures taken to reduce solid waste and eliminate hazardous waste: With our building renovation, 5 water bottle filling stations were installed. This reduces the number of single use plastic water bottles used while encouraging staff and students to drink more water. The Poe Health Center graciously gave us 135 reusable water bottles for students who did not have one. We are a Feed the Bin school in Wake County and previously had 5 carts and were only able to recycle paper. (Styrofoam trays were through CNS) In March of 2019 we switched to recycling all comingled materials. We now have 8 carts and we are now able to recycle cafeteria materials, such as large metal food cans. We have a recycling bin in every classroom, workroom, office, lounge, etc. throughout the building. When analyzing our data, we went from 8.5 full carts recycled in April 2018 to 10.5 in April 2019 and 12.75 in May of 2018 to 13 for May of 2019. All WCPSS switched last year to compostable cafeteria trays which is a positive step from polystyrene trays, but we are still exploring options for composting them.
- 18. Which green cleaning custodial standard is used? Cleaning products are peroxide based (Green). The primary cleaner used in WCPSS is ECOLAB Peroxide Glass and Surface Cleaner, it is used for all general cleaning. WCPSS is analyzing other green cleaning products, that may be introduced at a later time.
 - What percentage of all products is certified? ECOLAB is used for approximately 80-90% of cleaning
 - What specific third party certified green cleaning product standard does your school use? ECOLAB is Green Seal certified. All bathroom paper supplies are certified by EcoLogo.

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): 72%
 - How is this data calculated? On average we have 48 students in after care and 15 absences. 492-48-15=429. We have an average of 16 in daycare vans, 15 walkers, 10 in cabs (with 2 or more students), 65 students in carpool (with 2 or more) and 201 on buses. So 16+15+10+65+201=307. 307/429 is 72% These are averages, which is why they don't add up perfectly. Afternoon bus route attendance was used, walkers counted in person, attendance data and after care rosters reviewed and a staff member surveyed afternoon carpool for how many students were being picked up in each car. *We do have preschoolers and students with special needs that need to ride carpool or cabs for safety concerns.



20. Has your school implemented?

- Safe Pedestrian Routes to school or Safe Routes to School
- Describe activities in your safe routes program: LHECMES partnered with Safe Routes of Wake County
 and the University of North Carolina Highway Safety Research Center along with the Town of FuquayVarina to create and implement a variety of improvements for our students who walk and bike to
 school. The nearly \$1 million project included new curb ramps, crosswalk markings and signs, which
 improve the accessibility and visibility of the crossings for neighboring students and families to more
 safely walk and bike to our school. This project was completed in October of 2018. We also participate
 yearly in the Walk / Bike to School day to promote physical activity and reducing bus use.
- 21. Describe how your school transportation use is efficient and has reduced its environmental impact: LHECMES has separate bus, carpool, and walker locations. Last year we used a megaphone and walkie talkie system to call students from the cafeteria for carpool pick up. At the end of last year, we changed our procedure to significantly decrease wait time and idling in carpool. Now we use a shared online spreadsheet to que up students from the cafeteria when their carpool number is called, and 6 cars are loaded at one time in the afternoon. With the help of 5th grade safety patrol students, we can unload up to 7 students at a time in the morning. *We are a magnet school and therefore some parents must provide their own transportation if they are outside of our base school zone. We plan to reach out to other magnet schools to see their solutions.
- 22. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships: We have coordinated with the Division of Air Quality and are planning to have monitors for our 5th graders to use in their weather unit in Spring. We plan to roll out a "No Idling" campaign in our carpool then.

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.:

WCPSS had adopted an Integrated Pest Management (IPM) Policy for managing insect and rodent intruders at our schools. IPM is a holistic, preventive approach to managing such pests. IPM minimizes pesticide use in our schools and on school grounds. For more than ten years, WCPSS has concentrated on removing pest habitats from schools rather than using pesticides for pest management. For WCPSS policy, pesticides fall into (2) categories; The first is "exempt" pesticides that are relatively low risk/nontoxic. The second is "non-exempt" pesticides having relatively higher risk/toxicity. As of July 1, 2007, "nonexempt" pesticides are NOT used inside any WCPSS building. We are the first school system in North Carolina to achieve this level of "green" pest management.

WCPSS is required under the "School Children's Health Act" [(NCGS 115C - 47 (45) (a)] to notify all students' parents, guardians, and custodians as well as school staff of the schedule of "non-exempt" pesticide use in and on WCPSS property. Further, the statute requires WCPSS make available any updates to the schedule upon request. The Environmental Health and Safety Department has prepared an annual "notification" and "request for



notification" documents to comply with statute-specific guidelines. These documents are located on the WCPSS website in the "Parents" section.

- 2. What is the volume of your annual pesticide use (gal/student/year)? Describe efforts to reduce use: For the last ten years WCPSS has concentrated on removing pest habitats from schools rather than using pesticides for pest management, making the amount negligible per gallon/student/year.
- 3. 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. We do not have an elemental mercury in our school. ✓ Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO). ✓ Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. We do not have any wood play structures. 	-p p p
purchase and use in the school. We do not have an elemental mercury in our school. Our school uses fuel burning appliances and has taken steps to protect occupants from carbon monoxide (CO). Our school has identified any wood playground or other structures that contain chromate copper	Our school prohibits smoking on campus and in public school buses.
monoxide (CO). Our school has identified any wood playground or other structures that contain chromate copper	
	Our school has identified any wood playground or other structures that contain chromate copper arsenate and has taken steps to eliminate exposure. We do not have any wood play structures.

- 4. Describe how your school manages and controls student and staff exposure to chemicals (including pesticides) routinely used in the school: IPM is employed instead of using pesticides. Cleaning products are peroxide based (Green). No chemicals are used in our science classes. WCPSS is also reviewing additional Green cleaning systems
- 5. Describe actions your school takes to prevent exposure to asthma triggers in and around the school: WCPSS does not allow smoking on campus. WCPSS custodial policy calls for: Bi-weekly dust mop/sweep all tile floors, vacuum carpet, Weekly: low dust all horizontal surfaces to height of 84", damp mop and buff hallway tile floors, mop tile floors in classroom, Monthly; high dust areas accessible with 6' ladder to include horizontal surfaces.
- 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: Water leaks are reported to the WCPSS Facilities Emergency Hot Line and a contractor is dispatched to evaluate. Potential mold problems are also reported to the Hot Line. WCPSS Facilities has a staff member designated to respond to reports of potential mold.
- 7. Our school has installed local exhaust systems for major airborne contaminant sources: Yes, bathrooms are separately exhausted to the outside. The mechanical room is direct vented to the outside and has fresh air make up for the space.
- 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 HVAC filters are changed every 3 months with a check of belts and cleaning if necessary. Inspections and preventative maintenance is performed annually on all HVAC equipment, and coils are cleaned at least every 2 years.
- 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: The HVAC system has fresh air makeup that met code requirements at the time of installation. Renovation was completed in 2018.



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: Our head custodian performs building checks daily. He is the "first responder" to any potential building and facilities issues. If a potential issue is found, such as a water leak, facility malfunction, fire hazard, or any other safety issue he immediately contacts LHECMES Administration and WCPSS facilities management.

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:

\boxtimes	Our school	has an on-s	ite food garden
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We have 3 tower gardens throughout our building that we can use year-round inside for growing greens. We also have 6 raised beds in an outdoor garden. 4 of them will be covered in a greenhouse over the winter so we can continue to produce vegetables that we can donate to our local emergency food pantry.

Health measures are integrated into assessments

Students in 2nd -5th grade are assessed on health-related fitness measures in Physical Education class.

- 12. Describe the type of outdoor education, exercise and recreation available: Students have Physical Education specials once a week for 40 or 45 minutes. Our PE teacher teaches outside when it fits into the unit/sport/skill being taught. During recess students have 2 different playgrounds available with different age appropriate equipment, basketball court with 2 goals, track and soccer field. Each grade level has a set of jump ropes, soccer ball, basketball, football and another bouncing ball to use during recess. During before/ after school care students spend time outside on the playground when weather conditions allow. We have field day outside in the Spring.
- 13. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships: We have free breakfast for all students available every day. A new initiative this year was to incorporate clubs during the day for 4th and 5th graders. Twice a month (for 45 minutes) the students will participate in the club of their choice. Our fitness choices are: Run Club, Yoga Club and Jump Rope Club. Our PE teacher has students participate in the Jump Rope for Heart fundraiser and in the "First in Fitness" school and county level competition. We have First Tee Golf after school in the Fall and our PTA was awarded an Action for Healthy Kids grant for 16 bikes and helmets for an after-school bike club in the spring.

LHECMES is a "Be Well School" participant in partnership with Poe Health Center. They are coordinating our participation in the Smarter Lunchrooms Movement (SLM) where are working to implement "versatile, simple, low- or no-cost strategies to help ... promote healthy choices and nudge students to *select, eat, and enjoy healthy foods* in school" and reduce food waste. The goals of the smarter lunchroom movement are to grow school meal participation with easy to implement steps. Our partnership also includes our participation in "Every Kid Healthy Week" by Action for Healthy Kids in the last week of April with a purpose to "improve the health and wellness of their students and the link between nutrition, physical activity, and learning." In 2017-18 we focused on the plants



grown in our tower gardens, plant parts and tastings. 2018-19 focused on bike and pedestrian safety to correlate with our new Safe Routes to School, and we will participate in 2019-20. We participate in Walk/Bike to school day and all bus and carpool drop offs are down the block at a church and students walk/bike to school from there.

Our 1st Thursday parent involvement night for February 2019 was Family Fitness. Our PE teacher organized stations throughout the gym and cafeteria to highlight family friendly ways to be active including: basketball, volleyball, bowling, jump ropes, hula hoops and many more. February 2020 will have the same theme.

Our Expedition that works in the raised garden beds took a walking field trip to the local emergency food pantry to donate their harvest of peppers, tomatoes, radishes, okra and turnip greens this fall and last Spring. We will continue to grow over the winter to help fill the gap of fresh vegetables at the food pantry. Students learned how the food pantry operates and the needs of families in our community who visit the emergency food pantry. Also, we have applied for the Apples 4 Ed Grant of \$4000 to fund a demonstration/teaching kitchen cart to be used with students and families to learn how to work with fresh fruits/vegetables to increase healthy eating/cooking.

For 4th grade's obesity prevention standards in Healthful Living/ PE and their nutrition standards in science, the Poe Center brought in fruits and veggies for students to taste test. In Environmental Inquiry, 4th graders researched a fruit and vegetable they were unfamiliar with and created a Google slide about it (including its vitamins/ minerals, identified a recipe with it, etc.) and the class shared these with each other. Students also researched different methods of growing it that might reduce the carbon footprint. This led into learning about, designing and creating their own aeroponics or hydroponics systems.

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? If yes, describe the health-related initiatives or approaches used by the school: Yes, Nursing services are provided based on an acuity model. Nursing services provide oversight for policies and procedures as outlined by Wake County Public School System and Wake County Health and Human Services.
- 15. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety? If yes, describe these partnerships:
 - Fuquay-Varina Police Department provides the GREAT (Gang Resistance Education And Training) program to all of our 5th graders. "The goal of the program is to teach good decision making and common sense to pre-teens transitioning from elementary school to middle school. The program helps young people acquire and practice positive life skills such as thinking before acting, dealing with bullies, communicating, respecting others and being good citizens."
 - Backpack Buddies- 33 students receive donations from local churches and the American Legion every Friday. These nutritious foods and meals support students with healthy foods through the weekend.
- 16. Does your school have a school nurse and/or a school-based health center? Yes
- 17. Describe your school's efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):



Our school utilizes restorative practices to strengthen community and deepen connections with staff and students. It shifts us away from punitive consequences for behaviors to more appropriate responses, positive behaviors and improves school climate. Students participating in circle have better conflict resolution skills and personal connections and understanding with classmates which reduces suspensions, increases attendance and therefore academic performance. We currently have 15 total staff (teachers from pre-K - 5 and admin) who are trained Circle keepers- We have our own coach who comes to our school one day a week. She currently goes into 12 classrooms, which is up from 10 last year. Our coach hosts staff restorative circles biweekly after school and she regularly has 11 staff members (teachers and admin) that attend. At our 1st First Thursday in September, all parents were invited to participate in circle with other grade level parents to deeper their understanding of Circle and begin to strengthen bonds between school and family.

Our full-time school counselor teaches a social emotional lesson in each classroom (K-5) once a month. Topics include self- awareness, self-management, relationship skills, responsible decision making and social awareness. She is trained in administering (and teaches) anti-bias lessons to K-5 where students learn about what equity is, why it is important, and how to practice it. She also leads a social skills group for five 1st/2nd graders, a coping skills group for six students in 3rd grade and a relationship building circle group for four 5th graders. All of our 1st graders get the Safe Child "funny tummy" lessons aimed at reducing child abuse. We have an attendance committee that has the principal, data manager, and student services members on it. They review and manage cases of students with chronic late arrivals and high absentee rates. We put on an Atten"DANCE" for students with perfect attendance each semester. We encourage teachers to give character trait awards and positive office referrals. We have calm down kits for each classroom. Our counselor and social worker are trained for conflict circles in the Community Resiliency Model (CRM).

Our school psychologist and social worker are both "Why Try" trained and have had crisis training. Our bi-lingual social worker holds a resource event at the beginning of the year to inform families of the local resources available – everything from our local emergency food pantry, connections to staff within social services and Interact (a crisis intervention center) to Note in the Pocket which provides clothing for families in need and FACES which provides emergency rent and utility assistance. She is on the Community Advocacy Committee for the Southern Region of Wake County, along with the town mayor, local community college, mental health facility, police and fire dept and more to help advocate for and learn about the resources available. The acuity for our social worker is based on mental health related data. Also, WCPSS contracts with an outside mental health agency to handle more complex and high-risk cases using a Memorandum of Understanding. They are stationed on various campuses throughout WCPSS by region. Our local contact has worked with several of our families.

We formed an Equity team this school year including classroom teachers, the music teacher, special education teachers and the Principal. We have one staff member that attended Equity training provided by WCPSS and we are creating a plan to send more staff and how we will then work with our entire staff. Additionally, we are creating and sharing resources for a monthly theme focused on diversity and equity. For example, November was American Indian Heritage and December was Human Rights and Celebrations of the world to showcase all the different ways that people celebrate holidays in various religions and cultures.



1. Which practices does your school employ to help ensure effective environmental and sustainability education?

Pillar 3: 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. WCPSS has implemented EL Education's curriculum in English/Language Arts; it is a comprehensive, standardsbased core literacy program that engages teachers and students through compelling, real world content. In multiple modules across grade levels, environmental topics and/or sustainability are the focus. For example, in 2nd grade there are two modules (1 per quarter) about pollinators: "The Secret World of Pollination" and "Providing for Pollinators." Last spring, we had a speaker from a local Environmental Education Center inform students about the plight of the Monarch butterflies. She brought chrysalises for us to keep and watch butterflies emerge and then we released them. All 2nd graders planted milkweed and purple cone flower to take home for the monarchs. Environmental and sustainability concepts are integrated throughout the curriculum. One of the responsibilities of the ECIS is to meet with grade levels and specialists during planning to integrate environmental and sustainability concepts into curriculum. For example, 4th grade was studying scarcity and supply and demand from an economic standpoint in social studies. The ECIS made a connection to wildlife and did an "Oh Deer" activity to simulate necessary resources for a population of deer. By "creating" events such as a wildfire or famine, they learned the vocabulary but through the lens of an environmental scenario. At the culmination of that unit in Social Studies they had "Environmental Enterprise Day." Students become entrepreneurs and were challenged to make or create items incorporating recycled or upcycled materials or an item with an environmental theme. Then they set up and "sold" their items to other students and staff. 3rd grade has an EL module in 4th quarter about water scarcity and conservation and they create video "service announcements" about why conservation is important and simple ways to conserve water. This year we have an EcoTV Expedition that can record these and get them on the school wide morning announcements! Environmental and sustainability concepts are integrated into assessments. Following the NC Standard Course of Study, there are science and social studies standards across grade levels that cover many environmental and sustainability topics. Students are assessed on these standards. \bowtie Students evidence high levels of proficiency in these assessments. All 5th graders in NC take a Science End of Grade test. In Spring 2018, the percent of our students meeting or exceeding proficiency (scoring a level 3, 4, or 5) was 52.1%. In Spring 2019, our proficiency jumped to 75.8%, an increase of 23.7%! We surpassed the 2019 WCPSS average of 71.5%. We believe this dramatic increase is a direct result of the implementation of our Environmental Connections Magnet theme.

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



As an Environmental Connections Magnet Elementary School, we want to ensure that our teachers are trained accordingly. Last Spring, all certified staffed participated in the Project Learning Tree professional development and last June, they participated in a 2 day PBL training that included time to plan units for the upcoming school year. Our 2 Environmental Inquiry teachers have had more intensive, in depth PBL training and have more in the Summer of 2020. Throughout this school year we are working with the NC Museum of Natural Sciences in their UTOTES (Using the Outdoors to Teach Experiential Science) professional development program. At the beginning of this school year, all certified staff had a full day of training and will have ½ day in winter and spring to explore how to best use our school grounds in teaching our students. Our ECIS has her NC Environmental Educator Certification and we have 6 teachers that have signed up, or are interested in, attaining theirs. Our ECIS maintains a shared online spreadsheet of all applicable upcoming professional development opportunities. We are planning to schedule Project WET training for staff our next school year. This past Fall our ECIS attended the North American Association of Environmental Educators (NAAEE) Conference and shared with staff what she learned.

- 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:

 N/A
 - 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? In EI, 4th graders researched hydroponics and aeroponics systems to learn how they work. Students sketched designs, used a budget to purchase upcycled/reusable materials in class for construction and then created their systems. They shared with classmates and decided which were the best options. Our school is joining the Community Collaborative Rain, Hail, and Snow (CoCoRaHS) Network. Students will observe and measure our rain gauge outside daily and enter data into an online monitoring database. With our trail cameras we participated in North Carolina's Candid Critters, a citizen scientist run camera trap survey of wildlife in North Carolina where we upload and identify the animals in our photos. In a 2nd /3rd grade Expedition, students are creating projects with "plarn" plastic yarn. Students measured the previously used plastic bags and calculated how much they would need to create different products. To tie into the 5th graders rainforests unit, the AIG teacher has students investigating different forests worldwide and the biomes they are in. They are utilizing activities from the "Natural Inquirer" to analyze data and calculate various forest areas to discover the amount of forest loss that is occurring.
- 4. How does your school use sustainability and the environment as a context for learning green technologies and career pathways? In our Green STREAM Expedition, students researched and experimented with a grass roof to see temperature differences. We have had guest speakers from the NC Forest Service and an oceanography professor from NC State visit and do activities with students and share about careers in their respective fields. We have had NC State Vet School and Entomology students visit to give real world connections to content, as well as discuss careers in their fields. In a virtual chat with meteorologists from the State Climate Office, students learned about how to pursue those careers. In March 2020, all 4th graders will be going on a fieldtrip to our local landfill to learn about new technologies in the waste management field as well as careers in that industry.
- 5. Describe students' civic/community engagement projects integrating environment and sustainability topics:



4th grade's 1st Quarter EL Module is on Poetry and Becoming Writers. The student's final product was to create a North Carolina related environmentally themed poem and the parents/families were invited to see the presentation. Topics included endangered/threatened native NC Species such as the Red Wolf, the Leatherback Sea Turtle, Carolina Northern Flying Squirrel and Swamp Pink and also Water/Ocean Pollution.

In EI, 2nd graders wrote letters to local restaurants to change their straw policy and we had 3 restaurants change to "Straw by request only". A group of 4th and 5th graders will be presenting to the Town Council in February for their support of initiatives for local stores and restaurants to reduce straw and plastic bag use. We have chosen to Adopt-A-Highway to remove the litter from Bridge Street on either side of our school to help our local citizens in our community and to reduce the amount of litter that is ending up in our local waterways.

We applied to host a community rain barrel construction and give away event but there were many applicants and we weren't selected this time but we plan to apply again and it opens our eyes to other similar opportunities.

6. Describe students' meaningful outdoor learning experiences at every grade level:

Our kindergarteners went outside to find shapes in nature and when practicing counting series of objects and the alphabet letters were placed in a tree to correspond with reading "Chicka Chicka Boom Boom." Also, students picked a tree on campus and are writing and drawing about how it changes through seasons. 1st grade used natural objects to create math equations. For their EL module about "Birds' Amazing Bodies" and "Caring for Birds" they went outside to study birds and they learned about the Sun/shadows outside. Our 2nd graders have measured, researched and planted pollinator gardens. They created maps using the outdoors and identified and labeled natural vs. manmade features on them. When studying meteorology, they researched, built and tested a variety of weather instruments and they observed and noted weather conditions and cloud types to identify weather patterns as meteorologists. For a 3rd grade EL module, students used materials from outside to create a "school" that would last through a rainy weekend, based on the book Rain School. When 3rd graders studied area and perimeter in math, they went out and measured our raised garden beds. When studying geometry, 4th grade students went outside to find parallel and perpendicular lines, rays, points and angles in nature. In their EL module about animal defense mechanisms, students collected materials from our campus to construct their own "new" animal and write about the defense mechanisms they created for it. For a 5th grade math lesson, students counted how many pine scales are on one pinecone and then calculated an average how many pine seeds are dispersed by the 12 Pine trees on our campus. 5th graders study ecosystems and in April 2020 we have our 1st trip to an aquarium at the coast and students will participate in a salt marsh hike as an extension. We will also visit a state park nearby, so students are able to immerse themselves in another unique ecosystem found in our state.

7. Describe how outdoor learning is used to teach an array of subjects in contexts, engage the broader community, and develop civic skills:

Our campus has a great courtyard, outdoor classroom, raised beds in different areas of the campus, as well as a 2nd story walk out collaborative space to facilitate teaching outdoors in a variety of contexts. Even writing spelling words or doing math problems on white boards outside promotes connections with the outdoors. Our Expeditions use the outdoors for many of our topics on a regular basis. "Creepy Creatures" students are outside on an insect hunt and our "Weather Watchers" can be found recording weather data while "Blooming Botany" might be pulling up weeds to discuss the root structure. This 30 minutes at the end of every day is another opportunity to make sure students are getting outside and connecting with nature.



At our Fall campus work session, we had the Southern Wake Conservationists (our local branch of the NC Wildlife Federation) till an area and plant native wildflower seeds in our new "no mow" zone. We also want to increase the natural learning outside and in the spring, we will be putting in an outdoor mini pond in our courtyard area and planting a large area as a butterfly garden. We have applied for a grant to receive free milkweed that we want to plant in another outdoor area and we have applied for a Native NC plant grant to get native climbing vines to grow up our chain link fence and provide food and cover for pollinators and birds. After our visit from the President of the Wake Audubon Society and learning about the struggles of the Brown head nuthatch, we have ordered houses from them that will be put up in the Spring. They will provide nesting areas for these local birds facing habitat loss due to development in our area.

Our school has a family engagement event each month called "First Thursday" and our October theme this year was "Outdoors In October." We had different stations for families to visit that included local Wake County parks to showcase their programs, a local Environmental Education Center to highlight their activities, lists of nearby arboretums and gardens along with a scavenger hunt in our garden. We had stations for bug sweeping, leaf/tree identification, laminated outdoor bingo cards for each family to take home and seed balls to take home and plant.

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:

Wake County Soil & Water Conservation- Guest speakers for 3rd grade about soil and erosion, Envirothon team, "Wetlands are Wonderful" Poster Contest and working to become a Wake County Watershed Stewardship School

Partnership with NC Museum of Natural Sciences - UTOTES professional development and installation of minipond and butterfly garden in the spring, field trip to Prairie Ridge location for 3rd grade, We will participate this Spring (for the 1st time) in "Shad in the Classroom" – hatching our eggs into fry and have a positive environmental impact by increasing numbers of native Shad whose numbers are dwindling.

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:

This year we started an Envirothon Club. 4th and 5th graders that want to learn more about the environment attend during club time twice a month. 5th graders will participate this Spring in the regional competition.

Our Specials teachers are doing an excellent job of integrating the environment in their curriculum. Our art teacher has taken grade levels outside to create art using natural materials such as pine straw, rocks and sticks. Our 4th and 5th graders in art club painted with gelatin fish to learn the Japanese art of fish printing. 2nd graders designed painted paper collage bugs and Kindergartners created clay butterflies. He uses saved paper scraps to create wildflower seed cookies with students. When he had an Artist in Residence the 5th graders and our self-contained ECS students in grades 3-5 created a mosaic mural of the water cycle that now hangs in the hallway. Our media center has a massive collection of Environmentally focused books. Our media specialist collaborates with classroom and EI teachers to ensure she reads books to students tied to the topics covered in class. Recently, she chose books about seeds for 1st grade, animal movements for Kindergarten and animal classification for 2nd grade. She also assembles classroom collections for teachers during units of study and she creates resource pages on the school website with ebooks and websites for the students to use. Our music teacher ties in tempo to



students' heartbeat and how it can be faster and slower, just like music. Another body connection is teaching about vocal cords- what/where they are located and how to keep them healthy for singing. When teaching about instruments she explores those made from natural materials such as wood, animal hides and gourds. This Spring she plans to have students outside using devices to record natural sounds they hear on our school grounds.

Another unique practice we have at LHECMES are our Expeditions (clubs) which are 30 minutes at the end of every school day. Students choose which topics they want learn more about and experience a different one each quarter. They participate in various hands on activities and PBL projects throughout. Our students are grouped by K/1st grade, 2/3rd grade and 4/5th grade to ensure age appropriate lessons and activities. All of our Expeditions are related to our Environmental Connections Magnet theme. A few examples include Coastal Ecology, Tree-Mendous Trees, Mammals of the Sea, Rainforests, Coral Reefs, Scales & Skin, Treasures from Earth and many more. Outdoor learning is integrated throughout- Mammals are Amazing and Night Creatures used trail cameras to see what animals are in the fields behind our school at night. Our teacher of Give Bees a Chance and EI was recently awarded the Whole Foods "Bee Grant" in conjunction with the Bee Cause Project and we are in the process of preparing for the installation of our indoor observation hive.