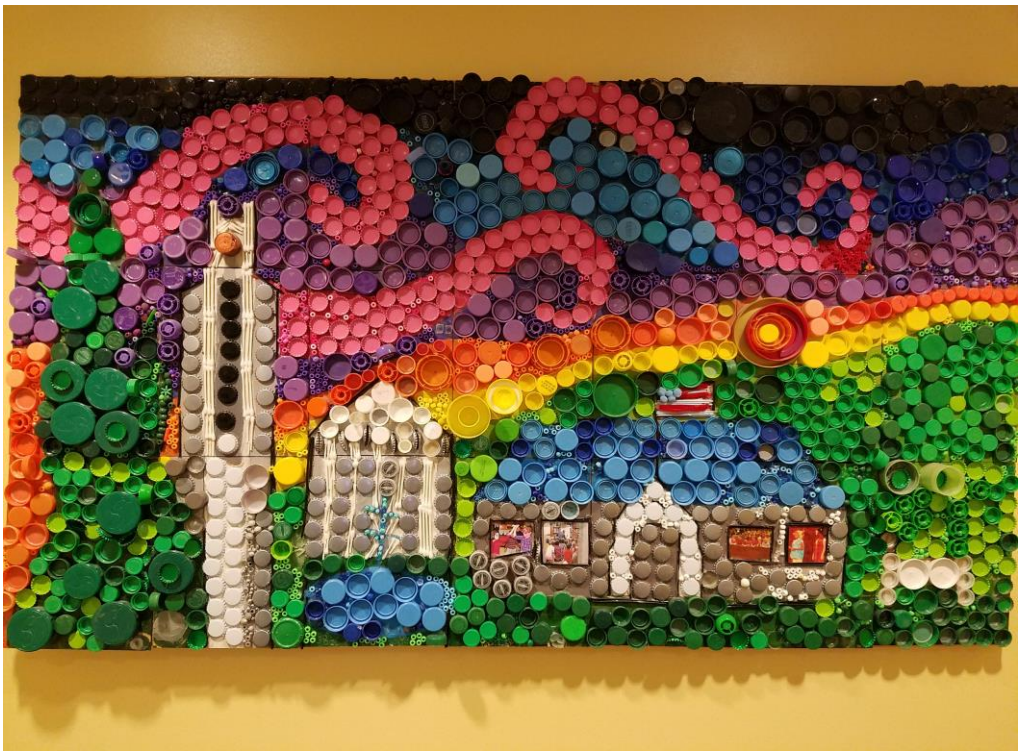

Greening the Lunch Line

National Presbyterian School Washington, DC

COLLABORATION, EDUCATION, AND ACTION

NOAA CLIMATE STEWARDS

School-wide Efforts Support Composting and other Environmental Measures

- Dale S Glass, MS, MSSE, NOAA Climate Steward

Student Council members at National Presbyterian School in Washington, D.C. initiated projects to make the school lunch program more environmentally-friendly. Actions included switching to composting lunch waste, promoting vegetarian options, teaching and monitoring recycling efforts, building a mural out of repurposed bottle caps, and encouraging reusable water bottle use with a water bottle filler fountain. The project helped students learn science and empowered them to make a difference in their world.

Engage

During the 5th and 6th graders' outdoor education trip to the Chesapeake Bay, students saw first-hand how humans' actions can impact the environment. They returned to school eager to make a positive difference.

Explore

In science class, students made diagrams showing inputs and outputs to the school. Looking for rich opportunities, they decided that the lunch program (serving 230 people daily) was a place where they could make a meaningful impact.

Explain

Research came first. Using information from the "Lifecycle of Stuff," students looked at the environmental impacts of all aspects of the lunch program. This included menu choices, transportation of food from farm to kitchen, serving in the lunch line, cutlery and dishes, food waste, and trash. Student Council members decided to take action. The

Student Council "Core Cardinals" worked with school faculty and staff to investigate the possibilities for "greening the lunch line." The school, with seed-money funding from the NOAA Climate Stewards Education Program, committed to support student-led initiatives including composting and installing a refillable water bottle station.

The student council group visited a local farm for a lesson in composting and sustainable gardening and became the key educators for teaching other students how and what they could compost. They built a demonstration compost bin and were amazed at how quickly banana peels and apple cores broke down. Student Council members presented their research on the environmental benefits of composting to the student body, showing how composting could redirect many bags of material from the regular trash and landfill stream and return it to the earth via compost.

Extend

The students extended their understanding from their science classroom investigations of environmental factors and climate. They made connections with their own lives and actions they could take at home such as turning off lights and unplugging chargers. They further extended the project by creating a mural in art class, re-purposing caps from milk bottles.

Evaluate

Composting: Students counted the number of bags of trash from lunch before and after the composting program. They also completed an attitudes survey showing an increased appreciation for the importance of food choices and actions. A typical day involves 233 compostable trays and 350 compostable utensils; composting these saves 140 pounds a week from going into landfills. The food waste fills four 50-gallon bins. These are picked up twice a week by the composting hauler.

Daily lunch trash from four grades BEFORE ↑ and AFTER ↓ the composting project.

Water Bottle Filling Station: In the first year, the station recorded 17,695 bottles filled; that's an average of over 200 per week. Students now bring reusable water bottles to school events such as Field Day instead of having disposable plastic water bottles provided by the Parents' Association.

Other Initiatives: The school lunch program includes meatless entrees approximately once a week and has increased vegetarian options. Locally sourced food is served in season.

Resources

NOAA Climate Stewards Education Program
FOSS Environments and FOSS Weather & Climate Curriculum
EPA Climate Change and the Life Cycle of Stuff
The Story of Stuff
Green Lunchroom

Dale S. Glass is the Science Coordinator at National Presbyterian School, an independent school for students in Nursery – Grade 6 located in Washington, DC. Her undergraduate degree is in Biomedical Engineering from Brown University, and she has a MS in Applied Mathematics and a MS in Science Education. Ms. Glass is passionate about service learning, science education, and teaching for understanding. She has been involved with the NOAA Climate Stewards Education Program (CSEP) since 2011 and has served as a peer mentor in the program for the past five years.

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