Lessons in a trash can: Teaching kids how to manage Earth’s resources

By Valerie Strauss
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How will young people become the leaders that society needs to adapt to environmental change? That’s the question that Wick Pritchard, a VISTA volunteer at Clarke Middle School in Athens, Georgia, asks and answers in the following post. Clarke is a high-needs, high-achieving traditional public school serving a very diverse population in a district committed to equity and opportunity.

By Wick Pritchard

How will our present middle-school students become the leaders that society needs to adapt to environmental change? At Clarke Middle School in Athens, Georgia, we are betting on resource management. We believe that schools can cultivate environmental awareness in their students by focusing on managing the resources around them. We have chosen three school settings to pilot this idea: the school vegetable garden, the family and consumer science kitchen, and the cafeteria trash can.

You can learn a lot by looking in the cafeteria garbage can, which I have been doing for the past school year. Your perspective of sustainability will change. You will discover that it is difficult for our students to stop for the tiniest moment to separate the recyclable and compostable items on their lunch tray from items that go to the landfill. And you will see waste: one day, 73 Chiquita bananas, bright yellow, entirely unblemished — and untouched by students.

As an AmeriCorps VISTA, I fight poverty in the United States. One manner in which I do this is by teaching young people how to manage the planet’s resources. Before my year of service as an AmeriCorps VISTA, I completed a masters’ degree in environmental planning and design while
working on the Tybee Island Sea Level Rise Adaptation Plan. Last month I was shocked when a report surfaced that oceans along the U.S. East Coast rose **four inches between 2009 and 2010**. This rapid spike in sea level rise was described by climate scientists as a “1-in-850-year event” or in other terms “very extreme” and “unprecedented.” Global climate change contributed to this event.

Events like the spike in sea level rise, coupled with my trashcan observations, underscore the need to educate our young people in how to handle environmental change. Here’s what we are doing at Clarke Middle School to help achieve this:

**The garden.** Three years ago, Clarke Middle School Principal Tad MacMillan not only greenlighted a school vegetable garden; he also started a plan that would spin sustainability into the school ethos using a school garden as the engine. Collaborating with the University of Georgia Office of Service-Learning and UGAarden (the University of Georgia’s student teaching garden), Clarke Middle School planted a garden right in front of the school.

This garden was our first area of attack in our fight to teach our students to manage their resources wisely. Because most of our students live in an urban area, they lack an awareness of gardens let alone natural ecosystems. Due to this fact, we use the school garden as a jumping off point for environmental awareness. Literally.
Four students are jumping over garden rows, the baby plants cowering from death by sneaker. These students and their classmates are in the garden to transplant collard and kale starts they grew in the school greenhouse. Dr. Mitchell, the school agriculture science teacher, places their activity into context. “Many of our students operate on a first grade awareness of a garden (thus the jumping),” she says. “In the past, kids were able to learn about gardens in their family garden,” she adds, “but now most of them have had no contact whatsoever with gardening. The more time they spend in the garden, however, the more they will learn about the makeup of garden.”

She allocates at least 10 minutes of each class period for garden work and garden related activities such as feeding the school chickens. Over the course of this year, I have indeed seen students learn their place in the garden, walking between garden beds not in them, high-stepping over garden beds not stomping them.

Without access, our students do not have the opportunity to form meaningful relationships with the natural world. They have no inner contextual map of their place within it. With no relationship how can we assume that they will attach value to the environment? At Clarke Middle we believe a school vegetable garden is a great starting point for students to plant a relationship with the natural world.

**The kitchen.** We chose the kitchen as our second area of attack to teach resource management. “Can we cook today?” the students plead. Baking powder, sugar, and salt are added to flour. Butter is cut into the mixture and milk added. Biscuits are rolled, patted, and cut out. A student reflects, “I don’t have to go to the Golden Pantry on Saturday mornings any more. Now I’ll make my own biscuits.”

Whether Hope Zimmerman, the school family and consumer science teacher, is introducing taste buds to arugula from the school garden or scratch biscuits, she is teaching our students to draw a map of the resources that keep all of us fed. This map includes the knowledge that preparing food from scratch can be inexpensive and nutritious as well as tasty. It can also help connect students to a time period other than their own, to a time when grandparents made apple sauce at home.
“Oh, no, we must use the peeler,” Mrs. Zimmerman politely demands. “Something happens when the students start using the peeler,” she says, “and I like it. I stop being the teacher. They stop being the students. They become community members, sharing stories about their grandparents and the food they prepare. They are focused, attentive.”

The apples Mrs. Zimmerman and her students use to make apple sauce have come from the school cafeteria. Since students cannot return uneaten apples on their trays to the kitchen, they have become accustomed to tossing them into the trash. Now our students are learning to divert their uneaten fruit, unopened cartons of milk, and unopened bags of carrots to the family and consumer science classroom where these trash bound items are transformed into ingredients for food labs.

Without practice in managing resources, our students will build few skills to manage any type of resource be that food related, environmental, or financial. Without management skills, how can we expect them to make choices that will have a positive impact on their future social and natural environments? Cooking from scratch in a family consumer science classroom is a perfect environment for learning about resource management.

The trash can. Back to the trash can, our third point of attack to teach resource management. In the trash I find roasted cauliflower, fresh broccoli florets, entire uneaten baked sweet potatoes, cups of guacamole. It doesn’t stop there. I even see unopened ice cream in the trash. But this picture is changing.

From November to December of 2014, our students diverted from the trash: 767 pounds of compost, 299 pounds of recycling, 260 bananas, 249 oranges, 341 apples, 207 unopened cartons of milk, 131
unopened cartons of juice, and much more. And we are not stopping. At last count we were nearing 2,000 pounds in compost collected.

At Clarke Middle School we are connecting our garden to our kitchen to our trashcans to our classrooms to our environment to our society. We are starting to manage our resources more wisely and gaining ground in the fight against environmental degradation. We are building a relationship between our students and the ecosystems that support society so that in the future our students will be able to manage not just a concept in a book but a living system they understand, perhaps even love.

As one of our sixth-graders told me while working in the compost pile, “We don’t need another Dust Bowl.”