



Princeton Day School: How We Are Changing the Culture

Liz Cutler



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We're out to change the culture, to capture hearts and minds.

As I watched the chickens scratch for bugs in their yard between the new bee pollinator meadow and the organic garden filled with early season greens, I couldn't believe how far we'd come. Children ran past me eager to check for eggs or speculate about the perfect name for each hen. This venerable northeast day school, well over 100 years old, is a place where traditions are strong and change usually comes slowly. But the sustainability initiative has altered the ship's course, affecting all aspects of the school, and it developed in five short years. Perhaps the institution was just waiting for the right moment and a group of people to make something happen. When we began to work on greening the school, we had no idea where we were headed or what would be the result.

Working from the Bottom Up

In most institutions where there has been school-wide sustainability change, it has been initiated from the top down. That was not the case here. In 2006, I began to ask everyone who couldn't outrun me down the hall how we could possibly fulfill our mission of graduating students to "act knowledgeably" and "lead thoughtfully," if they didn't understand the consequences of their actions on the environment. While I'd been working on sustainability issues with students for 20 years in my Nature and Literature class and in the Environmental Action Club (EnAct), my growing concerns around climate change made me realize that trying to change the world by myself, one student at a time, was far too slow. The school needed a team. Thirty-five faculty, staff, and administrators responded to my initial invitation to brainstorm, and together we created long lists of green hopes and dreams in three areas: facilities, curricula, and institutional behavior. These areas became the building blocks of the PDS Going Green initiative. From that original group of volunteers emerged a sustainability team who met monthly to see what we could accomplish with no money and very little institutional power.

Liz Cutler is the Sustainability Coordinator at Princeton Day School, a PreK-12 college prep school in Princeton, NJ with 900 students and 150 faculty.

Making Allies

Joining the team was a labor of love and drew on everyone's own personal feelings about the environment. The group was eclectic, attracting folks from all parts of the school. We were driven by our own passions and a sense that, as educators, we could influence students who would ultimately improve or worsen the world's problems. We couldn't guess who in the larger school community would become our best partners nor what strengths they would bring. But we did know the best way to make allies was to align our goals with someone else's so that our success was also their success, whether it was saving money or creating publicity or solving a problem. In an effort to eliminate paper coffee cups, for example, the ceramics teacher created a student project making mugs that were then for sale to the faculty. This served three goals: celebrated ceramics students (publicity made allies), eased the loss of the disposable cups, and raised money to fund other sustainability projects.

Celebration and Ownership

We had a team, but we needed the larger community to feel a part of the initiative, so we searched the school for all the little ways we were already acting sustainably. With \$500 donated by Interim Head of School Lila Lohr, we held a working dinner (a sustainable feast that highlighted the ecofriendly culinary abilities of our food service, FLIK by Chartwells), inviting a select group of 50 leaders including all the possible stakeholders—trustees, parents, faculty, students, and alumni—to celebrate those small green steps and to give us their best thoughts on what the school could look like in five years if we took sustainability seriously. The dinner created a buzz, a sense that we were already on our way, and important new allies who gave us scores of projects to consider.

Multiple Simultaneous Projects

We didn't have a long-range plan at the beginning, other than finding projects that would succeed,

be inexpensive, and highly public. It didn't seem to matter whether we focused first on facilities, behavior, or curricula because one ultimately led to the other. In fact, we began to realize that we needed to work in all three arenas at once. Because we couldn't predict ahead of time which particular projects would find resonance, it was useful to pursue multiple simultaneous projects so that at least a few would always be active and exciting, allowing the others to idle on a low simmer, waiting for whatever elusive combination of timing or personnel, whatever was needed to make them flourish. In this way, our team always had a continuing stream of success and momentum, avoiding the terrible frustration of fighting for particular planned projects that weren't working for whatever reason.

Clear Cut Changes

Of our several first projects, eliminating disposable water bottles was one of the most powerful because it connected with so many parts of the school. We were able to change the lower school snack from individual prepackaged single servings and disposable mini water bottles to snacks purchased in bulk and water poured from pitchers into washable cups. Part of the success was not just to make the change, but to have the change be visible and student-centered: the fourth graders were in charge of cup collection for washing, did the math around the number of water bottles saved (40,000/year), and measured how far those bottles would stretch lined up end to end (to the public library and back).

The food services people liked the financial savings, the fourth grade teachers liked the experiential math, the administrators liked the positive story and photo in the local paper, and the sustainability team liked the ecological footprint reduction. The kids went home and talked about it with their families. Soon water bottles disappeared from almost all our catered affairs, and the athletic department made reusable water bottles a required piece of sports equipment for every athlete. We learned that, for an initiative that was just getting off the ground, to pursue multiple simultaneous projects was a good opening strategy. Each project brought more allies and helped build the next one.

Growing a Garden Program

Our earliest large-scale success came from envisioning a teaching garden available to anyone interested in having an outdoor classroom and lab to enhance their curricular work. We live in a world where, increasingly, children are raised indoors in front of computer screens. While gar-



dens can be important tools to teach about life cycles and ecoliteracy, they are also opportunities to get kids outdoors, interacting in positive ways with the planet, falling in love with the taste of early beans and radishes, the beauty of zinnias, and the wonder of praying mantises. If we are going to ask kids to care about their effect on the Earth, they have to love it first. Since most of our students stay at the school for eight to 14 years, we have an opportunity to create regular, positive outdoor experiences. Gardens are a perfect way to do that.

A garden committee emerged. We wanted the feel of an old-fashioned barn raising, so we created a community garden-raising event. This day, unique in the history of the school, brought together 200 volunteers of faculty, students, staff, alumni, and administrators. With their own tools, all-donated labor and materials, and a small grant from a school family, we built a 50 x 100 foot garden in eight hours. FLIK, our now-loyal food service ally, donated breakfast and lunch, and student musicians entertained the workers with a continual flow of singers and players. Here was an opportunity for more surprising partnerships. The music department got to showcase their students, and FLIK got the promise of our harvest bounty for their lunch service. The sense of community, school pride, and general good feeling that grew from this event has been a great boon to the Going Green initiative.

Volunteers help build the PDS garden.

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A Garden Coordinator

Initially, we had thought all 24 of the lower school teachers would want raised beds for their classrooms. We learned pretty quickly, however, that many teachers didn't know how to use the garden, nor did they want to use it. We needed to entice them, and we needed help. The first year, the garden was overseen by Aaron Schomberg, the lower school science teacher, who had been a driving force behind its creation. We wrote a corporate grant proposal and found two parent alumni donors. With that money we hired a part-time garden teacher, Pam Flory, to help any interested faculty imagine how they might use it to enhance their already existing curriculum. Nothing was forced into the curriculum. Pam turned out to be a true pied piper, and students were excited about the garden; the learning was so rich that everyone wanted in. After three years it has become such a curricular success that this year the school hired Pam full-time.

The garden is now embedded completely into the science, language arts, and social studies curricula from prekindergarten through fourth grade. This year we added a garden apprentice program and club for the upper middle school, a parent/child work time each week, and a fall Harvest Celebration and Dinner. We are building an outdoor classroom that will contain a kitchen so students can learn the process from seed to table right there in the garden. Parents tell us they can't believe their kids are coming home begging them to buy fresh arugula and Swiss chard, to shop at the local farmers markets, to eat more kale. The food that doesn't get consumed in the context of classes in the garden appears as part of our daily lunch.

Important Parent Connections

We couldn't possibly have organized the garden-raising day without a strong group of dedicated and enthusiastic parent volunteers. These angels morphed into a monthly parent group (called PD-Seeds: Princeton Day Supporting Environmental Education and Discovery for Sustainability) to support our sustainability efforts. They include a small but tireless group of parents who help connect the green initiative to families and work on issues that are more parent-related (car idling, carpooling, litterless lunches, etc.). They have been staunch advocates, spokespeople for the project, mirroring what happens at school in the PDS families. If students find resonance at home for what they are learning at school, it doubles the effectiveness and creates ripples in the larger community.

Official Sustainability Coordinator

As our projects became more numerous and successful, it became increasingly clear that we needed an official sustainability coordinator. So the sustainability team volunteers plugged away at our list of projects and simultaneously drafted a part-time coordinator's job description. We carefully laid the groundwork for what we knew would be a significant request by first presenting to the trustee/faculty committee, faculty leadership teams, divisional faculty meetings, and Parent Association meeting before giving the proposal to the administration. Based on two years of public and successful small projects led by this volunteer team, the administration approved the hire of a quarter-time position whose job would be to guide the process and work with the team.

Focus on Food

Since one thing all of us do every day is eat, our next focus was on lunch. We began a series of changes to our lunch program, for example: purchasing more local food, increasing vegetarian options, eliminating disposable containers, moving the utensil cart to the end of the line so that people only take what they need (thereby reducing wash water), changing the napkins to 100 percent post-consumer wastepaper, and installing new ecofriendly napkin dispensers. The most important change we made was to begin composting.

Phased in over three years, the composting program includes kitchen waste and plate food. Having to choose between scraping plates into containers marked "landfill" or "garden" reminds us of our connections to the earth every day. Thus far we have composted over 50,000 pounds. Our food efforts were so extensive that in 2010 we won the Grand Prize of the Kiwi Crusaders Award for sustainable school dining. This positive publicity helped bring more people on board. We've continued to create a better, more sustainable food system with monthly "low-impact lunches" (all cold food) and "Healthy Me, Healthy Planet" Tuesdays (nutrient-dense, low-meat dishes), using the cafeteria as a teaching tool as well as a relaxation spot. Some folks are not thrilled with the changes in the food, but most roll with it or totally enjoy it. FLIK continues to be an enthusiastic partner and, as PDS is a poster child for their new sustainable efforts countrywide, last year they held their national chefs' meeting at the school. Affecting every person every day is the principle behind our cafeteria changes. The key, as we make these and all of our changes, is to educate the community as we go.

Student Ownership

Integrating into the curriculum ecoliteracy, systems thinking, a sense of place, and an understanding of the consequences of one's actions is crucial for students. If students only heard about sustainability in classes, however, it would be like the old story of the parents who require their child to wear a helmet while biking, but don't do so themselves. Students are quick to point out that kind of hypocrisy, which is why it has been important to work on facilities, institutional behavior, and curricula simultaneously.

Lower, middle, and upper schools' way of participating in the Going Green Initiative mirrors the interests of the folks in that division. The upper school runs the composting system and EnAct is a very active club. Last year they ran an eco-conference with 10 speakers, many nationally known, for all the high school students in New Jersey, New York, and Pennsylvania. Each year they organize the Harvest Dinner Garden Celebration for 250 diners and run the Green Cup Challenge, as well as bring in speakers and plan smaller events. The middle school organizes some of our Terra-Cycle recycling, the eighth-grade science classes study energy and climate change. The lower school students have the garden as part of their daily lives and get terrifically excited about our participation in the national Green Cup Challenge. Student enthusiasm cannot be underestimated.

The Green Cup Challenge

While America's culture is constantly changing, we as individuals struggle with it, preferring old habits. Yet most people will follow behavioral change patterns if others are doing it or if it makes them feel good about themselves. The Green Cup Challenge, a national school competition to reduce the amount of electricity used in the month of February, helps reduce our individual and collective carbon footprints by rewarding positive change behavior and publicizing success. In 2009 we participated in the Challenge for the first time and the EnAct students were the primary force for change. They worked with students across all grades to make it cool to turn off classroom lights, fans, and computers when not needed, and met with faculty and staff from facilities to IT, from athletics to development, asking folks to find ways to come on board. That month the school dropped 22 percent of our electricity use, saving over \$5000, enough to win first place amongst day schools nationwide. All participants felt they had played an important role in our success. The younger children talked about it so much at home that the next year when we participated in the same competition, PDSeeds ran a simultaneous program for families to compete against each



other, mirroring and reinforcing what we were doing at school. The changes in behavior that occurred the first year have been sustained.

Challenges

Of course, we have not always met with success or support. We have struggled with apathy, the feeling that sustainability is just one more thing to do in an already too-busy place, and the sense of guilt some folks feel about their own ecobehavior that makes them see greening as an all-or-nothing proposition in their own lives and in the life of the school. Two years prior to the beginning of the initiative the school completed a major building renovation in which all the green ideas had been value-engineered out. Some teachers felt this made the new initiative hypocritical. The team worked hard to communicate how every step forward is a good thing even if we still have a long way to go. Mostly, our work continues to be about getting folks to ask the question, "How can I accomplish my own goals in a way that considers their environmental impact?"

Tinkering with curricula is always a challenge. PDS already has a rich and successful curriculum that teachers are comfortable with, so it has been complex to help them understand that ecoliteracy is not another subject to be added, something to replace what they already teach. Rather, our goal is for ecoliteracy to be a lens through which we view our current curriculum. Some teachers understand this instinctively and have found ways to incorporate ecological and systems thinking; for others it has been more difficult, and just as with our search for allies, it has not always been obvious which teachers or departments will take easily to the work. Last year the sustainability team asked anyone who was interested to consider the question, "Where does it come from, where does it go?" in the context of their work

Pam Flory, PDS garden coordinator, uses the garden as a classroom.

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in the school. This helped many faculty members find a way to inject sustainable thinking into their classes, and teachers and staff who incorporated this question shared their methods aloud in full faculty meetings as inspiration for others.

Our most relentless opponent was and continues to be time. Everyone's schedule is already absolutely packed and finding space in the day to research greener ways to melt ice in the winter or reframe a Spanish class to find environmental topics is tough.

The Future

It speaks to the power of the idea that the sustainability initiative has spread to every part of the school from inside the classroom to buildings and grounds. We could never have made such progress without the encouragement of the administration, particularly our current head, Paul Stellato, who understands the initiative's urgency and gives it his full support. Fortunately, we also have several members of the board of trustees who believe in bringing this work into the school.

We have big ideas for the future.

- We are auditing our ecoliteracy curriculum to discover what we already teach from pre-kindergarten through grade 12 and how we can make sure all students graduate having experienced and been taught sustainable thinking.
- An ecology landscape planning and design firm is helping us consider ways to make PDS a more walker-friendly campus and we have made a commitment to build sustainably when we do it.
- The EnAct Club is creating a GreenFestival for spring 2012 where all teachers and students will have the opportunity to showcase one of their sustainability projects. The club is also organizing a fair for all other schools in our area to share their green work with the larger community.
- We hope to grow the garden program into the middle and upper schools.
- Many of our environmental choices in facilities and institutional behavior are invisible to the community: for example, CO₂ and passive solar sensors, low-energy gymnasium lights, corn-based deicers, green cleaning supplies, and recycled paper products. We need to make these more obvious so the campus itself becomes a teaching text.
- We are starting an environmental guest speaker series.

During the most recent accreditation process, the faculty and staff chose stewardship of self, community, and the environment as one of the areas it wants to improve and is willing to have measured during the next accreditation in 10 years. This amounts to a kind of mandate and will help us move forward. We hope to move the initiative from project based to mission based.

Template Ideas for Schools

Other schools are beginning to ask us how to create such a revolution on their campuses. Although every school will have its own path, and the successful sustainability projects will be a reflection of the folks in each community, we can offer a few hard-won general suggestions:

- Establish a sustainability team that reaches broadly into every constituency of the school.
- Make allies.
- Tap into the language of the school's current mission statement.
- Focus on many projects simultaneously and when one doesn't work, don't fret about it. Just move on to the next one.
- Work on facilities, curricula, and institutional behavior all at once.
- Don't worry about the 20 percent of folks who don't like what you do or who deny its importance. You need a smaller number of supporters than you think.
- Celebrate your successes publicly.
- Figure out ways to make your goals scratch someone else's itch.
- Use the power of the parent body.
- Form a cooperative of local schools in order to create a sustainability support group.
- Never underestimate the passion of a single, determined person.
- Get out of the way and let everyone else enjoy the success and limelight. Don't let the initiative appear to be one person's pet project.
- Feed people well and often.

People, not the buildings, are our biggest carbon footprint. Students' and their families' decisions now and in the future, personally and professionally, will have more cumulative impact than our school's physical plant will ever have. It is important to green our facilities to lower our environmental footprint, but it has an even more important role as a model for the entire school community. We're out to change the culture, to capture hearts and minds.

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As for me, this work is just an extension of the little kid who always preferred watching worms in the dirt to dressing up in party clothes. I'll always be an English teacher, but I'll never just be that again. The to-do list is endless and the fun has just started. Maybe now I'll feed those worms to the chickens.

Address correspondence to:
Liz Cutler
Sustainability Coordinator, Princeton Day School
P.O. Box 75
Princeton, NJ 08542

Email: lcutler@pds.org

Student and Teacher Feedback

PDS 4th grade teacher, Daniel Cohen: "My fourth graders created a "classcommons" of pencils and erasers in the fall, and their stewardship of these materials was astounding the entire year. The class, for the 1st time in my teaching career, wasted not, wanted not and built a greater sense of community around a real necessity in their lives as students."

PDS junior in high school, Adam Straus-Goldfarb: "PDS has an environmentally friendly ethos that permeates all that goes on in the school. The cafeteria is constantly giving students the chance to sample delicious, sustainability produced foods, and practices such as turning off lights when they aren't in use and opening a window rather than blasting the A/C are ingrained in the minds of students and faculty alike."

OASIS

OASIS (Organizing Action on Sustainability in Schools) is a nonprofit consortium of nineteen schools and school districts in the Princeton area who work together to promote sustainability in all of the schools. Founded in 2008, OASIS has held workshops for teachers, administrators, school board members, trustees, facilities and business managers, and the larger community. Princeton Day School was one of the founding members.

For More Information

To see more about Princeton Day School's sustainability initiative and our projects in facilities, institutional behavior, and curriculum, go to: www.pds.org and click on Sustainability. You can also find there a copy of the garden curriculum.

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