

Scraps to Soil!

Start Your Own School Composting Program

A Guide for Establishing Food Scrap Collection Systems in High Schools & Colleges



Food Scraps Are Nutrients, Not “Waste”

In 2010, more than 34 million tons of food waste were generated in the U.S., more than any other category except paper. Food waste accounted for almost 14% of the total municipal solid waste stream, and less than 3% of this was recovered and recycled in 2010. The remainder — 33 million tons — was thrown away, adding to our already overburdened landfills and releasing significant quantities of methane, a potent global warming pollutant, according to the [Environmental Protection Agency](#).

We can, and *must* do better. Food scraps, far from being “waste,” are actually rich in nutrients. When combined with brown plant material like yard waste or paper towels, they can be turned into “compost,” a key ingredient for making healthy soil. Compost has many benefits, including:

- ❖ Reducing or eliminating the need for chemical fertilizers when growing food
- ❖ Promoting higher yields for agricultural crops
- ❖ Restoring our forests, wetlands, and endangered habitat by amending contaminated soils
- ❖ Removing solids, oil, grease, and heavy metals from stormwater runoff
- ❖ Capturing and destroying industrial volatile organic chemicals (VOCs) in contaminated air

How To Use This Guide

This resource guide is designed to assist high school and college campus leaders — whether you’re a student, faculty member, teacher, or administrator — in launching or expanding school composting programs. It offers step-by-step suggestions and considerations in starting, monitoring, evaluating, and improving your program, along with selected resources to turn to for further assistance (see back).

The ideas presented here are based on the experiences of Bay Localize, an Oakland-based nonprofit environmental and community development organization. During 2011-2012, we partnered with the Peralta Community College District to implement a food scrap collection and composting program at its flagship campus, Laney College. Working with a diverse range of students, teachers, food service workers, custodians, and administrators, we expanded that program to collect over 40,000 pounds of food scraps from the student café, kitchens, and Bistro restaurant in *just over one year!* (See next page.)



Use this guide to help you assess the potential at your own school, build a “Dream Team” to make it happen, set clear goals for your program, engage as many people as you can, and, after you’ve had a chance to evaluate your successes and challenges, aim higher to achieve even more. *Good luck!*

Assess What's Going On and Who's Doing What

- ❖ **Find Out About Existing Programs and Processes:** Sometimes, your school or college will already have some sort of food scrap collection or composting going on. Maybe kitchen workers are separating out coffee grinds or saving fruit rinds, and either placing them in a school compost bin or taking them home. Does your school have a recycling program? Maybe there's a campus greening initiative or zero-waste policy on the books. Find out about these and see how you can integrate composting into existing programs wherever possible.
- ❖ **Map Out What's Going On:** Create a materials flow chart showing where food scraps are now going (most likely in the trash!), and mark who's responsible for handling them at each stage in the process, from food prep to disposal.
- ❖ **Know Your Compostables:** Find out what types of food scraps are accepted by your local waste management agency. Large-scale operators often accept bones, meat, eggshells, and other items that home composting bins can't handle. Find out what types of kitchen or café items are compostable (i.e., napkins, paper cups, plates, bioware, etc.)? Finally, assess how much volume is being wasted each day, and calculate the potential savings that your composting program could achieve, assuming everything is collected properly.
- ❖ **Know Your School's People and Workers:** Are there ecology or biology teachers? What about environmental clubs or student associations? Do you know the custodians, groundskeepers, dining services, or kitchen workers? Get to know them. They're going to be essential partners in creating or expanding your school composting program.

Build Your "Dream Team"

- ❖ **Identify Core Players:** Now that you've assessed what's going on, and who's doing what, you have some ideas about who to recruit to be on your Dream Team. Make sure you've identified people working in all key departments, food service workers, students, and leaders at the top (like a principal, dean, or college president). As you encounter problems later — and you will! — their support will prove invaluable.
- ❖ **Get Buy-In Early:** Getting everyone on board early is absolutely essential. By failing to get full buy-in from the custodial team, we had to delay collection in the café four months!
- ❖ **Solicit Ideas from Students, Faculty, and Staff:** Meet with your core players, one-on-one, listening for potential challenges and opportunities around starting a new program. Good ideas become great ideas when they're developed in partnership with those who are at the heart of the program. We improved our plans for placing bins thanks to input from custodial and dining services workers. And involving students in school outreach and helping to design educational posters and signs was invaluable in getting people to participate.
- ❖ **Cultivate Deep Student Leadership:** Since students are what make any school program succeed, their leadership must take center stage. Students will take to the idea of composting more readily under student leaders, and are often in the best position to know what will work.

Scraps to Soil Initiative

Laney College, Oakland, CA



Over the 2011-2012 academic year at Laney College, Bay Localize and Sustainable Peralta diverted 40,500 lbs. of food scraps and compostable materials from the landfill. Despite clear challenges, we established a promising new program that also:

- ❖ Established new kitchen and student cafeteria food scrap collection infrastructure
- ❖ Built a broad, committed network of student volunteers and campus partners
- ❖ Reached about 2,000 students and faculty via campus outreach
- ❖ Helped launch a compost-to-garden class on campus

Set Clear Goals, Roles, and Benchmarks for Success

- ❖ **Vision Together:** Hold a kick-off visioning session of your Dream Team with all your core players and partners. Make time for everyone to introduce one another, and have everyone share what kind of composting program they'd like to see, and how they'd like to make it happen! Establish a regular meeting schedule to keep the team on task and working together.
- ❖ **Set Clear Goals:** Establish measurable, achievable goals around the collection of food scraps and compostables. Develop these together so that you are sure to come up with realistic goals. If your school currently sends 2,000 pounds of food scraps each year to the landfill, jointly assess how much of that could reasonably be collected and composted. Be very clear about this so you'll all have a shared goal to work towards. Just be prepared to change this later on!
- ❖ **Assign Clear Roles and Responsibilities:** With any large team, there's often confusion as to who is responsible for what aspects of the program. Make sure clear roles and responsibilities are assigned around education, monitoring, training, food scrap transport, bin placement, etc.
- ❖ **Make Sure Someone's Keeping All Parts Working Together:** Identify someone to play a day-to-day role in making sure all the program's moving parts were working smoothly. Someone, ideally someone onsite, needs to serve that function to avoid system breakdowns.
- ❖ **Set Benchmarks for Success:** On your way toward achieving your goals, you'll need to establish a clear timeline of benchmarks to measure your success. These could be things like having installed 5 new food scrap bins in the kitchen, having reached out to 500 students (see next section), or having collected and measured your first 100 pounds of food scraps. Whatever your benchmarks, just be sure they seem feasible to achieve in the time you have.

Educate, Enroll, Reward, and Celebrate!

- ❖ **Educate, Educate, Educate!** Since composting is new for a lot of people, you'll need to invest a considerable amount of time educating the students, teachers, and staff. Focus your efforts on those who will be participating in the program most. Host events that give people hands-on ways to compost their food scraps, demonstrate the benefits, and get them involved. Hold trainings for those responsible for keeping things running smoothly, especially food service workers and custodians.
- ❖ **Post Clear Signage:** Most people will choose to compost because they see a sign or poster next to one of the food scrap bins. Use bright colors and clear language to catch people's eyes (see example at right). Consider holding a design competition among the students, and offer a reward for the best sign!
- ❖ **Repeat Education and Training, Again and Again:** We learned that education and training around composting is an enduring requirement. Students, teachers, and workers are constantly changing at schools and college campuses, and so, outreach and education efforts must be repeated every term.
- ❖ **Offer Rewards:** Consider setting up rewards for food service workers or student groups who help meet your goals. This could be a cash prize, gift certificates, or a plaque of achievement.
- ❖ **Celebrate Your Successes:** As milestones are achieved, celebrate them! Throw a party, a concert, or social gathering, and publicly acknowledge those who are making a difference.



Evaluate Your Progress, Make Improvements

- ❖ **Monitor Your Progress:** Conduct interviews with core program participants, identifying what's working, what challenges they are facing, and asking for recommendations. Set up site monitors to see how many "contaminants" (i.e., plastics, tin foil, cans, bottles, wrappers, etc.) are being placed into your food scrap/compostables bins. See which bins are used most often. Survey students and others about whether they're using the bins, and if not, why not?
- ❖ **Make Improvements:** Based on your observations and feedback, acknowledge what needs to be changed, and develop plans to improve your program. This may mean placing the bins in more convenient locations, making sure signs are more clearly visible, or assigning compost "monitors" to help people learn how to use the bins properly. Just be sure to be friendly!

Aim Higher and Share What You Learn

- ❖ **Aim Higher:** Ask tough questions that can take your program to the next level:
 - What's really holding the program back from taking off?
 - Is there space at the school where some of the food scraps could be composted? A garden?
 - How could composting make money for the school? Or become a local enterprise?
 - How could you get parents, community leaders, or local organizations involved?
 - Could food scraps or landfill waste be reduced by changing what the school purchases?
 - Could the composting program and lessons be incorporated into the classroom/curriculum?
 - Are there support grants or other revenue sources that could strengthen the program?



- ❖ **Share Lessons Learned:**
 - Reach out to other schools to share your experiences
 - Establish a peer-to-peer network among participating schools in your community, district, or region
 - Document lessons learned and distribute a report
 - Put your story on your school's website, YouTube channel, Facebook or Twitter feed. Make a video
 - Let the media know about your program, especially after you've reached some of your goals

Key Resources for Further Information

- ❖ California Department of Resources CalRecycle Organic Materials Management
<http://www.calrecycle.ca.gov/Organics/Default.htm>
- ❖ Environmental Protection Agency's Composting Resource Directory
<http://www.epa.gov/osw/conserves/rrr/composting/index.htm>
- ❖ EPA's "Service Learning: Education Beyond the Classroom" (hands-on composting awareness)
<http://www.epa.gov/osw/education/pdfs/svcllearn.pdf>



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