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K12 SUSTAINABILITY REPORT:
COMPOSTABLES VS. REUSABLES AT BENJAMIN FRANKLIN ELEMENTARY

Benjamin Franklin Elementary piloted a successful reusable ware program for the Glendale Unified School District in California.

Like many schools in California, Benjamin Franklin Elementary in Glendale is working to balance state mandates for waste reduction and expectations from parents and the community with federal school nutrition requirements and tight budgets. It's a tough job, but the school saw impressive results from a pilot program instituted during the 2019–20 school year. By implementing an automated dishmachine program in conjunction with reusable ware, the school was able to reduce their cost of compliance by thousands of dollars each year.

Benjamin Franklin Elementary's food service operations fall under the leadership of Jennifer Chin Gonzales, Director of Nutrition Services, who oversees the 32 schools in the Glendale Unified School District. The meal program at this K-6 school serves around 100 students for breakfast and 200–250 for lunch each day, an average of about 50% meal participation for the student body of around 650 students. Meals are provided daily, 185 days from mid-August to mid-June, with about four combined weeks off for Thanksgiving, winter break and spring break. "Benjamin Franklin Elementary has done a lot of pilot programs, and their role as a leader in our school district as far as sustainability initiatives made them a prime candidate for this study," Chin Gonzales says.

Driving Change & Cutting Food Waste

The pilot program for reusables came as a result of a previous program at the school to implement a composting program, changing how the school dealt with food waste while switching from disposable Styrofoam serving ware to compostable plates and compartment trays. Two things spurred the initiation of that waste reduction program: state mandates and parental concern. In California, the government enacted legislation, including state bill AB1826, mandating that businesses that generate a specified amount of organic waste per week needed to arrange recycling for that waste; which would include all of their compostable items. Schools across California are aware of the state mandates but are at different levels of compliance, and many still use Styrofoam and other disposable ware.

Parent support, along with a good waste management partner, helped Benjamin Franklin Elementary be proactive with their food waste and sustainability programs. Parents formed a "Green Team" through the PTA to create and set up an organic waste and separation program. Parent volunteers monitor the school's lunchtime waste alongside school staff and student teams, helping students separate liquids, solids, compostables, and recyclables. Parents teach

students how to put on gloves and help sort the waste. There's even a share table for unopened, prepackaged food which helps reduce food waste and supports local hunger initiatives. Parent support has been a key to success, as well as enthusiasm from kids who love to help.

▶ Benjamin Franklin Elementary's waste separation station, including their share table.

The Cost of Sustainability

The Glendale district food service program receives approximately $3 per plate, including funds from the National School Lunch Program, the state of California and student payments. That $3 has to cover all expenses including food, serving ware, equipment, supplies, labor and healthcare; and many of these costs keep going up. For a sustainability program to be viable, it must work within this budget and not put the school in the red.

While the composting program at Benjamin Franklin Elementary brought the school into compliance with the state mandate, the use of compostable serving ware significantly raised their costs. The compostable ware alone more than doubled their spend on trays and plates. **Benjamin Franklin Elementary spent over $5,800 on their disposable spork kits and compostable trays for over 64,000 meals each year.** By switching to reusable plastic trays and metal silverware, the school was able to eliminate this cost from their budget, which simultaneously reduced waste.

Implementing a Reusables Program with an Automated Dishmachine

To better meet their objectives of reducing waste, complying with state mandates, and controlling costs, Benjamin Franklin Elementary decided to obtain an automated Hobart AM15VLT Ventless Door Type Dishmachine and switch to reusable trays and silverware that can be washed for daily reuse.

The reusable trays also helped cut down on the weekly volume going into the compostable dumpster. Their trash vendor, Southland, charges per dumpster, per pickup and comes once per week for the compost dumpster. Since switching to reusable trays, they have been able to reduce the frequency of pickup to every other week, saving an additional $1,280 each year.

There are 10 total labor hours in the kitchen (their hourly rate with benefits is $16.78/hour) and hand-washing prepware consumed about an hour to hour and a half of that time each day. Introducing 350 or more trays into the daily routine and hand washing all of them would make a reusable program impractical, but the Hobart AM15VLT dishmachine they acquired washes all of the ware, including sheet pans and other prepware, in a fraction of the time and makes the program manageable.

Although It took some time for the staff to adjust to using the new dishmachine and to the new dishroom workflow, they were able to adapt and quickly became proficient the more they used the machine. The added time for washing all of the ware each day is only around 30 minutes, or $1,550 per year. This is slightly offset by the time the custodian saves by not having to dispose of the compostable trays (~$310 per year).

▶ The Hobart AM15VLT Ventless Door-Type Dishmachine washes all of Benjamin Franklin's prepware and reusable ware.

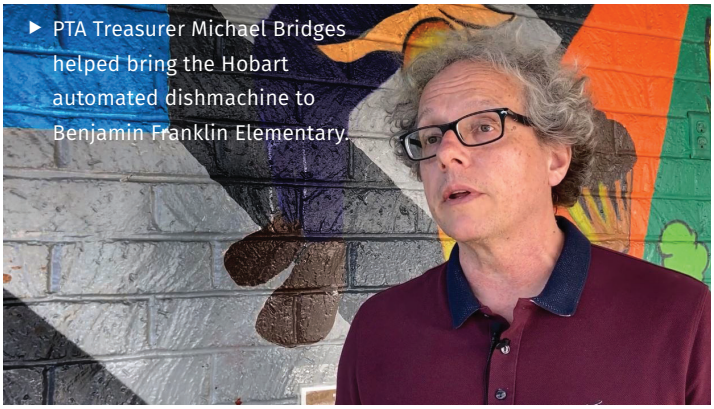
The Savings

Of course, the dishmachine program has associated costs as well, including purchasing and installing the machine and the use of water, energy, and chemicals to operate it. But, when everything is added up, the day-to-day costs of this reusable program are lower than the costs of the compostable program, with **total annual savings around $5,700 per year.**

The up-front costs to acquire a dishmachine, reusable ware, and other equipment can range from $10,000–$20,000. It's not uncommon for a Hobart dishmachine that is well taken care of to last 15 or more years, so Benjamin Franklin's program can pay for itself several times over during the lifetime of the dishmachine, while also meeting their sustainability objectives and the state mandates.

In addition to financial savings, the dishmachine program reaps environmental benefits as well. Filling the wash and sanitizer sink once per day for manual washing uses around 16,000 gallons of water per year. The AM15VLT dishmachine is much more efficient. Washing an average of 33 racks per day at the school, it only uses 7,000 gallons of water per year. Saving 9,000 gallons of water in a drought prone state is a big deal!

The **program comparison on the back page** shows the program costs and savings that Benjamin Franklin Elementary has seen with their automated dishmachine program.



▶ PTA Treasurer Michael Bridges helped bring the Hobart automated dishmachine to Benjamin Franklin Elementary.

For schools looking at an affordable sustainability option, a reusable ware program with an automated dishmachine can make a big difference. **Watch a short video and learn more at warewash.hobartcorp.com/GlendaleK12**

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COMPOSTABLE VS. REUSABLE PROGRAM COMPARISON

Compostable Program Costs	Unit Price	Qty	185 Day Cost
Utensil, Sporkette, w/Spike Straw CS/1000ct	$0.01	350	**$818**
Tray, 5 Compartment PAPER 240/CS	$0.07	350	**$4,265**
Napkins (2 per student per day)	$0.002	700	**$272**
Annual silverware replacement (fork & spoon)			**NA**
Tax			**$509**
Total			**$5,865**
Trash Bags	$0.040	8	**$59**
Compostable Waste Bags	$0.406	4	**$300**
Total			**$360**
		Pickups/Week	
Trash Dumpster (2x)		10	**$3,509**
Compostable Dumpster (1x)		1	**$2,562**
Total			**$6,072**
3 Compartment Sink			
Water			**$129**
Chemicals			**$2,546**
Energy			**NA**
Labor	$16.78	1.0	**$3,104**
Total			**$5,779**
TOTAL ANNUAL VARIABLE COSTS			**$18,075**

Reusable Program Costs	Unit Price	Qty	185 Day Cost
Utensil, Sporkette, w/Spike Straw CS/1000ct	$0.01	0	**$0**
Tray, 5 Compartment PAPER 240/CS	$0.07	0	**$0**
Napkins (2 per student per day)	$0.002	700	**$272**
Annual silverware replacement (fork & spoon)	$0.292	175	**$51**
Tax			**$31**
Total			**$354**
Trash Bags	$0.040	7	**$52**
Compostable Waste Bags	$0.406	3	**$225**
Total			**$277**
		Pickups/Week	
Trash Dumpster (2x)		10	**$3,509**
Compostable Dumpster (1x)		0.5	**$1,281**
Total			**$4,791**
Automated Dishmachine			
Water			**$71**
Chemicals			**$1,869**
Energy			**$588**
Labor	$16.78	1.4	**$4,346**
Total			**$6,874**
TOTAL ANNUAL VARIABLE COSTS			**$12,295**
TOTAL ANNUAL SAVINGS			**$5,780**

Benjamin Franklin Elementary's reusable ware program saved them $5,780 per year over their compostable ware program.

To learn more about Hobart Commercial Dishwashing solutions, visit us at www.hobartclean.com/am16-k12 or call us at 888 4HOBART.

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